2010 Oregon State University Extension Plan of Work

Status: Accepted
Date Accepted: 05/29/09

I. Plan Overview

1. Brief Summary about Plan Of Work

It is the mission of the Oregon State University Extension Service to engage the people of Oregon with research-based knowledge and education that focus on strengthening communities and economies, sustaining natural resources, and promoting healthy families and individuals. It is our vision to lead Oregon State University's outreach mission by engaging with Oregon's people and communities to have positive impacts on community livability, economic vitality, natural resources sustainability, and the health and wellbeing of people. Based on these positive impacts, the OSU Extension Service is recognized as one of America's top-5 Land-Grant University Extension systems. OSU Extension Service's Core Values and Operating Principles are as follows:

- Value 1: Community-based: We value community relationships and connect OSU to local people and issues to enhance the present and the future of the people and communities of Oregon.
- Value 2: Accountability: We focus on achieving measurable outcomes, and document and communicate the impact and value of our work.
 - Value 3: Credibility: We deliver relevant, research-based knowledge through our educational programs.
 - Value 4: Diversity: We exhibit respect, value differing perceptions and world views, and encourage diversity.
- Value 5: Partnerships: We collaborate with academic, public, and private partners to achieve greater results and build community capacity. We value the public good that comes from collaborating with volunteers.
- Value 6: Responsiveness: We engage with community partners and learners to identify priority issues and needs, to design timely responses, and to build future capability.

The OSU Extension Service Goals are:

Goal 1: Improve Access to High-quality Learner Services -- Extension will provide access to the knowledge resources of OSU by being focused and nimble in engaging Oregon's diverse people and communities in high-quality learner services that help build sustainable community futures.

Goal 2: Invest for Excellence and Impact -- Extension will increase and diversify its funding base and encourage program excellence through strategic investments within three thematic areas. This will create measurable outcomes and impacts that will be reported widely to stakeholders.

Goal 3: Increase Effectiveness with Appropriate Technology -- Extension will use established and new technologies strategically to increase efficiencies, expand outreach, and enhance and report the outcomes of its educational services.

Goal 4: Refine Leadership for University Outreach -- Oregon State University will provide dynamic leadership for its third mission by creating the position of Vice-Provost for University Outreach and Engagement. This action will strengthen OSU by establishing leadership for the engagement and outreach mission in a manner consistent with leadership for the University's teaching and research missions.

This 2010-2014 Plan of Work reflects our ongoing commitment to the vision, values, and goals of Oregon State University Extension. The updates for 2010-2014 are minimal, with some refinement of planned programs for 4-H Youth Development and Forestry. The new on-line planning and reporting system (SOARS) was fully implemented at the end of 2007, and will allow us to collect specific data related to FTEs for planned programs, program outputs and outcomes, publications, and patents for 2008 and beyond. We anticipate that SOARS will greatly improve our ability to modify and update Oregon's federal plan of work more accurately with each passing year.

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Estimated Number of Professional FTEs/SYs total in the State.

Year	Exter	nsion	Rese	earch
Tear	1862	1890	1862	1890
2010	219.0	0.0	0.0	0.0
2011	199.0	0.0	0.0	0.0
2012	179.0	0.0	0.0	0.0
2013	179.0	0.0	0.0	0.0
2014	179.0	0.0	0.0	0.0

II. Merit Review Process

1. The Merit Review Process that will be Employed during the 5-Year POW Cycle

- Internal University Panel
- External University Panel

2. Brief Explanation

The Directors and/or Associate Directors of Extension in Idaho, Washington and Oregon will review respective plans and provide input to each state. The plan will be reviewed internally by the OSU Provost and the Deans of five colleges with active Extension programs.

III. Evaluation of Multis & Joint Activities

1. How will the planned programs address the critical issues of strategic importance, including those identified by the stakeholders?

Oregon State University Extension faculty (located in all 36 counties in Oregon) work closely with local stakeholders including farmers and ranchers, foresters, agency personnel, elected leaders, educators, health professionals, environmental organizations, researchers, and a myriad of other public and private entities to establish need and design appropriate programming. In many cases, stakeholders are directly involved in the programming as volunteers or by permitting demonstrations and applied research trials on their properties. Additionally, faculty utilize critical demographic and economic data, and examine current research findings to identify societal needs and opportunities for significant social, environmental and economic impacts. Programming is then planned based upon this input within each of the five academic colleges with Extension programs (Forestry, Agricultural Sciences, Health and Human Sciences, Sea Grant and Education). The Oregon State University Extension Service provides funding to these colleges on the basis of planned outcomes outlined in a biennial plan submitted by each college. All Extension FTE must be accounted for in these plans. The plans are reviewed annually and span a two-year timeframe. Annual evaluations are conducted by the Director of the OSU Extension Service to determine how effectively each planned program is addressing key needs and delivering the anticipated outcomes and impacts described in each plan.

2. How will the planned programs address the needs of under-served and under-represented populations of the State(s)?

Under-served and under-represented audiences are identified through demographic analyses and through interaction with appropriate stakeholders including minority serving organizations. Extension faculty and program assistants are recruited with language skills and cultural knowledge to enable effective programming for specific target audiences. This includes active recruitment of faculty and paraprofessionals from within migrant populations. These individuals have been extremely successful in delivering programming in ways that are compatible with the customs and cultures of these audiences. Specifically, programs described in this plan of work will be developed to reach Native American, Latino, African American, Russian, and Hmong audiences. Additionally, programs are planned to reach developmentally and physically challenged individuals and high risk

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populations such as inmates and persons on probation. Finally, significant resources are applied supporting programming designed to assist older adults and/or those with limited resources.

3. How will the planned programs describe the expected outcomes and impacts?

A new on-line accountability system called the Outcomes Assessment Tool (OAT) was deployed in 2006 to aid in documentation of outcomes and impacts of programming. During 2007 the Outcomes Assessment Tool (now called SOARS-Stories, Outcomes, and Accomplishments Reporting System) was extensively modified to increase its usability and provide easier connections between the different levels within OSU Extension (e.g. local programming, campus specialists, Extension program areas, college and Extension Administration, and CSREES). This new system provides a uniform process based on the Logic Model for all faculty to report the outcomes of their programming, and how the results of local programming are contributing to the long-term outcomes identified by each Extension program area. To facilitate this assessment, individual faculty members will conduct on-site evaluations to determine the degree of learning that occurs within each program conducted. This will generally be assessed with pre- and post-evaluations. Additionally, follow up surveys and site visits will be used to document the extent of application of knowledge acquired through Extension programs. Finally, blocks of programming called "program work areas" will be evaluated at least once during each 5-year period to assess the long-term social, environmental and economic benefits of the extension programming. Funding will be allocated by each college with Extension programs and applied to support an in-depth analysis of the impacts of the programs utilizing recognized and appropriate evaluation procedures and tools.

4. How will the planned programs result in improved program effectiveness and/or efficiency?

Annual assessments of program effectiveness through SOARS will be used to determine if programs are reaching the desired audiences, the cost of program delivery, the amount of learning taking place, and the degree of application of learning. These data will allow Extension leadership to make tactical decisions about changes in program design or reallocation of resources to more effectively and efficiently reach desired audiences leading to desired outcomes and impacts. Additionally, new technologies will be incorporated to augment program efficiency and to improve and expand the reach of programming. This includes application of technologies such as digital video devices, delivery of live educational events through video conferencing, active Internet-based teaching, and extensive use of web-based information delivery. Additionally, OSU will be actively participating in the development of the eXtension initiative. Hopefully, new and exciting materials will be available through this resource within the coming 5-year period. A new faculty position in Extension and Experiment Station Communications focuses on developing new technology-based delivery systems, training faculty and staff to use these systems, and evaluating the effectiveness of new delivery strategies.

IV. Stakeholder Input

1. Actions taken to seek stakeholder input that encourages their participation

- Targeted invitation to traditional stakeholder individuals
- Survey of the general public
- Survey of traditional stakeholder individuals
- Targeted invitation to non-traditional stakeholder individuals
- Targeted invitation to selected individuals from general public
- Targeted invitation to traditional stakeholder groups
- Survey of selected individuals from the general public
- Targeted invitation to non-traditional stakeholder groups
- Survey of traditional stakeholder groups

Brief explanation.

Input is solicited through a statewide advisory network that directly advises the Vice Provost for Outreach and Engagement and Director of Extension. This advisory committee is made up of individuals representing production agriculture and forestry, environmental groups, county government, youth and family-serving organizations, organizations representing coastal issues, and business and industry. The committee meets 1-2 times per year for two days. Additionally, the committee is connected with the Vice Provost's and Director's office via email throughout the year.

• Every county in the state maintains an advisory structure. These include both general broad-based advisory systems and those that are more specific to programming areas. These advisory groups generally meet 4-12 times per year to actively review programming and to provide input to county faculty and Extension leadership.

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- Each academic college with Extension programming maintains advisory structures at the college and departmental level. These inform Extension programming within each of these units.
- In the Portland Metro region a planning process is in place that seeks input from senior officials at numerous targeted agencies and organizations dealing with health and wellness, innovation and economic development, the environment, success of youth, and the fine arts within the Metro region. This process provides input about OSU's role in urban regions and specifically the Portland Metro area. These sessions also provide a network of interested parties to guide more in-depth planning processes. Invitees to these sessions represent largely non-traditional stakeholder groups.
- The College of Forestry holds listening sessions in one region of the state each year. Participants are invited that represent a broad cross-section of the forestry sector (industry, landowners, policy makers, general public). Information from these sessions is then used in statewide planning conducted annually.

2(A). A brief statement of the process that will be used by the recipient institution to identify individuals and groups stakeholders and to collect input from them

1. Method to identify individuals and groups

- Use Surveys
- Other (Web searches of potential participants, Extension Director's Blog, New Extension Demographer, Visioning Project
- Use External Focus Groups
- Use Internal Focus Groups
- Needs Assessments
- Use Advisory Committees
- Open Listening Sessions

Brief explanation.

Many mechanisms are used to identify individuals, groups, and organizations that are Extension stakeholders. Some specific efforts are cited below.

- Internet searches are used to identify organizations with stakes in various programs.
- We confer with partnering organizations to identify and engage appropriate stakeholders.
- We confer with existing advisors about other groups and individuals that should provide input.
- We actively solicit internal input about appropriate stakeholders to add to advisory structures or to survey about need and effectiveness of Extension programming.
- We utilize demographic data to ensure that all segments of society are adequately represented among identified stakeholder groups and especially among those groups providing input to the decision-making processes.

In 2006, Extension added a full-time demographer to the faculty in order to access, intepret, and respond to Oregon's demographics more effectively. In 2007 we collaborated with WSU and their Center for Bridging the Digital Divide in a visioning project that helped define the possibilities for OSU in the 2017. This project, a series of in-depth interviews with key stakeholders, yeilded both formative and summative data for planning purposes. Time in 2007 and 2008 was also devoted to strategic planning as OSU Extension aligned with Extended Campus for creating the Division for Outreach and Engagement and emphasized the third mission of the university, engagement, as an equal partner with learning and discovery.

2(B). A brief statement of the process that will be used by the recipient institution to identify individuals and groups who are stakeholders and to collect input from them

1. Methods for collecting Stakeholder Input

- Meeting with traditional Stakeholder individuals
- Meeting with traditional Stakeholder groups
- Survey of traditional Stakeholder groups
- Survey of traditional Stakeholder individuals
- Survey of the general public
- Survey of selected individuals from the general public
- Meeting specifically with non-traditional individuals
- Meeting with invited selected individuals from the general public
- Meeting specifically with non-traditional groups

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Brief explanation

See response 2(A).

3. A statement of how the input will be considered

- In the Budget Process
- In the Action Plans
- To Set Priorities
- Redirect Extension Programs
- In the Staff Hiring Process
- To Identify Emerging Issues
- Redirect Research Programs

Brief explanation.

Stakeholder input is broadly used in the organization. This influences budgetary outlays for various program and subsequently affects the program delivery. Stakeholders serve on virtually all faculty search committees and thus directly affect hiring decisions. Stakeholder input is widely used to set priorities at all levels of the organization.

In addition, with the implementation of SOARS in 2007, each Extension program area is asked to develop an annual program plan of work that will include a description of how stakeholder input was gathered and used to determine the priority work areas and their associated program outcomes.

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V. Planned Program Table of Content

S. NO.	PROGRAM NAME
1	Forestry: Public Engagement for Planning Oregon's Future
2	Forestry: Enhancing the Competitiveness of Oregon's Forest Enterprises
3	Forestry: Sustaining Natural Resources
4	4-H Environmental Stewardship
5	4-H Nutrition and Health
6	4-H Science, Technology, and Engineering
7	Ag: Small Farms and 'Natural' and Organic Production Systems
8	Ag: Dryland Cropping Systems
9	Ag: Livestock Based Production Systems
10	Ag: High Rainfall and Irrigated Cropping Systems
11	Healthy People, Healthy Communities
12	Healthy Aging
13	Financial Literacy
14	Sea Grant: Water Protection and Management

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V(A). Planned Program (Summary)

Program #1

1. Name of the Planned Program

Forestry: Public Engagement for Planning Oregon's Future

2. Brief summary about Planned Program

Extension professionals will identify needs and develop and deliver programs to address those needs leading to increased public awareness about the importance of natural resources management and natural resource-based industries to the citizens of Oregon. Increased public awareness will in turn result in better decision-making resulting in improved public policies, elevated economic condition for Oregonians, development and enhancement of sustainable industries, reduced per capita use of resources, improved condition of the natural resource base, and lessened community conflict focused on natural resource issues.

3. Program existence : Mature (More then five years)

4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
610	Domestic Policy Analysis	30%			
801	Individual and Family Resource Management	25%			
803	Sociological and Technological Change Affecting Individuals, Families and Communities	30%			
806	Youth Development	10%			
901	Program and Project Design, and Statistics	3%			
902	Administration of Projects and Programs	2%			
	Total	100%			

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

The US with approximately 5% of the world's population now consumes approximately 1/3 of the world's industrial wood. The trend in consumption of fiber and other consumables is not sustainable, and the public must become more efficient in the utilization of products derived from the world's natural resource base. In Oregon, 30% of the population resides in metropolitan

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Portland and 73% of the state's population resides in urban areas across the state. These persons are often unaware or misinformed about the interdependence of the states economy on the utilization of natural resources. Because Oregon's public policy is often driven by a ballot-based referendum system, the voting public must have adequate and unbiased knowledge about natural resource-based issues and the critical thinking skills to make informed decisions.

2. Scope of the Program

In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

The forestry sector is very important to Oregon's economy, but most Oregonians are buffered from this economic reality. Oregon's population is increasingly urban and typically relatively new to the Pacific Northwest. These consumers of forest products are increasingly disconnected from the realities of forest management and production systems. They also place a premium on recreational use and the aesthetics of Oregon's forests.

2. Ultimate goal(s) of this Program

Oregonians will better understand the ecology and management practices employed within the state's forests. Additionally, Oregonians (including youth) will become better critical thinkers and possess the information necessary to make political decisions affecting natural resource-related issues.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Vacu	Exte	Extension		Research		
Year	1862	1890	1862	1890		
2010	1.7	0.0	0.0	0.0		
2011	1.5	0.0	0.0	0.0		
2012	1.3	0.0	0.0	0.0		
2013	1.3	0.0	0.0	0.0		
2014	1.3	0.0	0.0	0.0		

V(F). Planned Program (Activity)

1. Activity for the Program

Programs will be developed and delivered to the general public (including youth), civic leaders, and policy makers to increase knowledge and understanding about Oregon's complex forestry sector and its importance to the state's and region's economies.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension				
Direct Methods	Indirect Methods			
WorkshopDemonstrationsEducation Class	NewslettersWeb sites			

3. Description of targeted audience

General public (including youth), civic leaders, environmental groups, policy makers.

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V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2010	4800	15000	2000	1500
2011	4500	13500	1800	1350
2012	3150	12150	1620	1210
2013	3150	12150	1620	1210
2014	3150	12150	1620	1210

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

2010:18

2011:16

2012:14

2013:14

2013 8

2014:14

2014 8

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0

V(H). State Defined Outputs

1. Output Target

2010:11

Number of educational classes

	2010 20	2011 18	2012 :15	2013 :15	2014 :15
•	Number of workshops				
	2010 5	2011 4	2012 :4	2013 4	2014 4
•	Number of demonstrations				
	2010 :10	2011 9	2012 :8	2013 B	2014 ß
•	Number of recurring newsle	etters published			

2012 :8

Number of web sites maintained

2011 9

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:10 **2011**:19

:8

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V(I). State Defined Outcome

O. No	Outcome Name
1	Households reporting improvements in behavior related to sustainable living and energy/climte related educational programming.
2	Organizations and individuals reporting improved public policies or policy statements as a result of Extension programs.

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Outcome #1

1. Outcome Target

Households reporting improvements in behavior related to sustainable living and energy/climte related educational programming.

2. Outcome Type: Change in Action Outcome Measure

2010 :150 **2011** : 150 **2012** : 150 **2013** :150 **2014** :150

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

803 - Sociological and Technological Change Affecting Individuals, Families and Communities

Outcome #2

1. Outcome Target

Organizations and individuals reporting improved public policies or policy statements as a result of Extension programs.

2. Outcome Type: Change in Action Outcome Measure

2010 265 **2011** : 265 **2012** : 265 **2013** 265 **2014** : 265

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 610 Domestic Policy Analysis
- 803 Sociological and Technological Change Affecting Individuals, Families and Communities

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Appropriations changes
- Competing Public priorities
- Economy
- Natural Disasters (drought, weather extremes, etc.)
- Government Regulations
- Public Policy changes
- Competing Programmatic Challenges

Description

Policy-related issues are very dynamic and tend to be affected by public opinion that is in turn affected by external factors such as disasters, economic changes, etc. Programming must also be very flexible and dynamic to effectively deliver desired outcomes.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Retrospective (post program)
- During (during program)
- Before-After (before and after program)
- Case Study

Description

During and after the event, degree of learning will be documented. Application will be documented by follow up surveys of

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participants. The impact of application will be assessed through case studies representing a sub-sample of those involved in programming.

2. Data Collection Methods

- Telephone
- Case Study
- Sampling
- Mail

Description

Surveys will be conducted based upon OSU Institutional Review Board policies, proceedures, and guidelines. For quantitative data, customized mail and follow up telephone surveys will be used. The number of persons sampled will be based upon the estimated degree of variation in the target population and the desired degree of resolution. For qualitative assessments, care will be taken to assure that case studies are representative of the larger population served by the programming.

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V(A). Planned Program (Summary)

Program #2

1. Name of the Planned Program

Forestry: Enhancing the Competitiveness of Oregon's Forest Enterprises

2. Brief summary about Planned Program

Extension professionals will work with forest enterprises to help them become more profitable. This will create new markets for both private, including family-owned forests, and public forests that will not only lead to economic benefits but also to forest health benefits.

3. Program existence : Mature (More then five years)4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : No

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
402	Engineering Systems and Equipment	17%			
511	New and Improved Non-Food Products and Processes	31%			
602	Business Management, Finance, and Taxation	25%			
604	Marketing and Distribution Practices	12%			
723	Hazards to Human Health and Safety	11%			
901	Program and Project Design, and Statistics	2%			
902	Administration of Projects and Programs	2%			
	Total	100%			

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Currently, the forest sector contributes \$12.8 billion to Oregon's total industrial output, the largest contributor from the natural resource sectors. Natural resource enterprises are critical to both rural and urban economies, but expected growth in new businesses and employment in this sector will likely be in the value-added sector usually located near the markets in urban

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areas. Today, these wood processing industries provide 75,000 direct living-wage jobs and contribute \$2.8 billion in wages. However, this growth is predicated on these industries having access to cutting edge technologies leading to efficient production of quality products. Timber harvests from private and family forests comprise an increasing percentage of Oregon's total annual timber harvest from all production sectors. Management of these resources requires not only knowledge of the natural resource but also effective business management strategies as well. For instance, taxation and other policies change and will continue to change over time. Extension provides assistance to family forest owners in keeping current with these changes. Additionally forest land owners often do not have access to markets for their timber and non-timber forest products. Extension programs help bring these individuals together to discover new markets for traditional and specialty woods. Competition from other countries with low wages, and less stringent or non-existent forest practices laws, safety laws, and environmental laws make it difficult for Oregon businesses to compete. Additionally, competition from non-wood substitutes will increase even though wood is often the best economical and environmental choice. The competitiveness of this large and economically important sector will largely be determined by its ability to apply new technologies. The Land Grant University (OSU) and Extension has been key in developing and communicating new tools to make Oregon's forest industries grow and compete in this challenging environment.

2. Scope of the Program

In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Forest industries will remain economically very important for Oregon. Jobs will remain stable for the primary forest products industry and new jobs will be created in the value-added sector. Demand for both timber and non-timber products from private lands, including small family-owned lands, will remain at a high level or increase over the next decade. There will be pressures on family-owned forestland owners to convert to non-forestry uses or to sell to Timberland Investment Management Organizations (TIMOs). It will be important to find new uses for small, often burned or diseased, timber to foster health in Oregon's public forests.

2. Ultimate goal(s) of this Program

Productivity and profitability of forest products industries and landowners will be enhanced by knowledge and information provided by the Extension Forestry Program.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Vaca	Exte	nsion	Re	search
Year	1862	1890	1862	1890
2010	3.6	0.0	0.0	0.0
2011	3.3	0.0	0.0	0.0
2012	3.0	0.0	0.0	0.0
2013	3.0	0.0	0.0	0.0
2014	3.0	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Programs will be developed and delivered to increase the knowledge of the public and policy makers leading to improved policy development and implementation. Additionally, programs will teach business owners and forest landowners how to become more efficient and successful in meeting their objectives leading to enhanced sustainability, profitability, and quality of life by providing training and information leading to creation, maintenance, and retention of profitable value-added forest products industries. Productivity and safety of forestry and forest products company employees will be increased through appropriate training leading to retention of family wage jobs in the forestry sector. Forest health will be enhanced by discovering new uses for underutilized and poor quality fiber from the forest leading to more cost effective thinning and forest management practices.

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2. Type(s) of methods to be used to reach direct and indirect contacts

Extension				
Direct Methods	Indirect Methods			
 Workshop Other 1 (testing and development projects) Education Class 	NewslettersWeb sites			

3. Description of targeted audience

Public and private forest landowners, primary and value-added forest products companies, and to a lesser extent the public.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2010	1500	12000	0	0
2011	1350	10800	0	0
2012	1220	9720	0	0
2013	1220	9720	0	0
2014	1220	9720	0	0

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

2010:3

2011 :2

2012:1

2013:1

2014:1

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0

V(H). State Defined Outputs

1. Output Target

Number of educational classes

2010 50

2011 44

2012:38

2013 38

2014 38

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Number of workshops planned

	2010 20	2011 16	2012 :15	2013 :15	2014 .15
•	Number of demonstrations				
	2010 :10	2011 9	2012 :8	2013 ß	2014 ß
•	Number of recurring newsl	etters published			
	2010 :11	2011 9	2012 :8	2013 ß	2014 ß
•	Number of web sites maint	tained			
	2010 :10	2011 9	2012 :8	2013 B	2014 ß

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V(I). State Defined Outcome

O. No	Outcome Name
1	Change in company behavior based on interaction with the Oregon Wood Innovation Center.
2	Increase in sales or employment attributed to new products/markets developed as a result of assistance
	from the Oregon Wood Innovation Center.

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Outcome #1

1. Outcome Target

Change in company behavior based on interaction with the Oregon Wood Innovation Center.

2. Outcome Type : Change in Condition Outcome Measure

2010 :10 **2011** : 10 **2012** : 10 **2013** : 10 **2014** : 10

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 402 Engineering Systems and Equipment
- 511 New and Improved Non-Food Products and Processes
- 604 Marketing and Distribution Practices
- 901 Program and Project Design, and Statistics

Outcome #2

1. Outcome Target

Increase in sales or employment attributed to new products/markets developed as a result of assistance from the Oregon Wood Innovation Center.

2. Outcome Type : Change in Condition Outcome Measure

2010 :10 **2011** :10 **2012** :10 **2013** :10 **2014** :10

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 402 Engineering Systems and Equipment
- 604 Marketing and Distribution Practices

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Public Policy changes
- Competing Programmatic Challenges
- Government Regulations
- Appropriations changes
- Economy
- Natural Disasters (drought, weather extremes, etc.)

Description

Forest products firms are very sensitive to economic pressures created by global competition. In addition, any factor that affects supply of wood can signicantly alter the structure of these industries and the impacts of Extension programming. This includes public land policy, economic changes, and foreign competition.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

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- Case Study
- During (during program)
- Retrospective (post program)
- Before-After (before and after program)

Description

During and immediately after the event, degree of learning will be documented. Specific businesses will be used to document the degree of application and the economic impact of this application. This will then be extrapolated to other similar businesses.

2. Data Collection Methods

- Sampling
- Structured
- Telephone
- Case Study
- Mail

Description

Surveys will be conducted based upon OSU Institutional Review Board policies, proceedures, and guidelines. For quantitative data, customized mail and follow up telephone surveys will be used. The number of persons sampled will be based upon the estimated degree of variation in the target population and the desired degree of resolution. For qualitative assessments, care will be taken to assure that case studies are representative of the larger population served by the programming.

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V(A). Planned Program (Summary)

Program #3

1. Name of the Planned Program

Forestry: Sustaining Natural Resources

2. Brief summary about Planned Program

Extension professionals will work with forest landowners to help them manage Oregon's natural resources in a sustainable way. Land stewards' knowledge about enhancing sustainable natural resources will lead to improved forest ecosystem health and improved economic benefits.

3. Program existence : Mature (More then five years)4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
112	Watershed Protection and Management	8%			
122	Management and Control of Forest and Range Fires	10%			
123	Management and Sustainability of Forest Resources	80%			
901	Program and Project Design, and Statistics	1%			
902	Administration of Projects and Programs	1%			
	Total	100%			

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Forty-five percent or 28 million acres of Oregon's 62 million acres total land mass are classified as forestland. Additionally, 38 percent of this forest resource is privately owned. A total of 16% of the forest resource (42% of the privately owned forest land) is owned by non-industrial private landowners – often family-forest owners. Oregon's privately owned forests produce most of Oregon's commercial timber and are very important for sourcing many small to large forest products firms. Owners of small family forests do not usually have the education or training to understand how to manage their forests to meet their objectives. Many have recently acquired forest lands. Landowners need knowledge on how to manage their lands and ecosystems to meet their objectives. Proper land stewardship can reduce the rate at which land is converted from forests to other less sustainable practices and protect the forest resource from insects and disease. Additionally, fire suppression has allowed the growth of unnaturally dense understory vegetation in Oregon's forests with 39% of these lands at high risk and about 45% are classified as moderate risk for intense fires. Encroachment of urban growth into forests has placed lives and structures in increasing

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danger from wildfire. Proper forest land management can reduce the risks associated with wildfire.

2. Scope of the Program

In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Many of Oregon's family-owned forest families are preparing to change ownership to the next generation. Often, this younger owner does not have the same stewardship ethic. It is important to help this next generation of forest owners value and sustainably manage their lands. If this land ownership ethic cannot be maintained, more forest lands will be purchased by Timber Investment Management Organizations (TIMOS) or converted to non-forestry uses. Non-forest uses of previously forested lands can lead to other societal issues such as degradation in water quality, fish habitat and endangered species habitat

2. Ultimate goal(s) of this Program

As the direct result of Extension Forestry programming, forest landowners will better understand choices in managing their lands, be stimulated to make independent management decisions, and acquire diverse skills to accomplish their management objectives. This will lead to improved water quality and salmon habitat, and improved forest and ecosystem health and productivity.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Vasa	Exte	nsion	Research	
Year	1862	1890	1862	1890
2010	8.0	0.0	0.0	0.0
2011	7.2	0.0	0.0	0.0
2012	6.5	0.0	0.0	0.0
2013	6.5	0.0	0.0	0.0
2014	6.5	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Programs will be developed and delivered to increase the knowledge of forest landowners to become better stewards of their properties. They will be given the knowledge necessary to make informed choices to match their management objectives. Landowners will receive knowledge necessary for them to manage not only for timber production but also for an array of non-timber forest uses, many of the uses benefiting society as a whole – examples are water quality and improved aquatic habitat.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension					
Direct Methods	Indirect Methods				
Education ClassWorkshop	 Other 1 (statewide curricula developed) Web sites Newsletters 				

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3. Description of targeted audience

Family-owned forest owners are the main audience. Public forest owners and Oregonians living in the rural-urban interface are secondary audiences.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2010	7750	30000	0	0
2011	6975	27000	0	0
2012	6275	24300	0	0
2013	6275	24300	0	0
2014	6275	24300	0	0

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

2010:16

2011:14

2012:12

2013:12

2014:12

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0

V(H). State Defined Outputs

1. Output Target

Number of educational classes

2010 310 **2011** 273 **2012** :233 **2013** 233 **2014** 233

Number of workshops planned

2010 35 **2011** 31 **2012** .26 **2013** 26 **2014** 26

• Number of recurring newsletters planned for publication

2010 :12 **2011** :11 **2012** :8 **2013** :8 **2013** :8 **2014** :8

Number of web sites maintained

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2010:15 2011:13

2012 :11

2013:11

2014 :11

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V(I). State Defined Outcome

O. No	Outcome Name
1	Number of families engaging in succession planning for their forests and tree plantations.
2	Number of Christmas tree farms implementing best management practices.
3	Number of forest landowners reporting improved forest and natural resources management practices.

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Outcome #1

1. Outcome Target

Number of families engaging in succession planning for their forests and tree plantations.

2. Outcome Type: Change in Action Outcome Measure

2010 :150 **2011** : 150 **2012** : 150 **2013** :150 **2014** :150

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 123 - Management and Sustainability of Forest Resources

Outcome #2

1. Outcome Target

Number of Christmas tree farms implementing best management practices.

2. Outcome Type : Change in Action Outcome Measure

2010 50 **2011** : 50 **2012** : 50 **2013** 50 **2014** : 50

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

123 - Management and Sustainability of Forest Resources

Outcome #3

1. Outcome Target

Number of forest landowners reporting improved forest and natural resources management practices.

2. Outcome Type : Change in Action Outcome Measure

2010 500 **2011** : 500 **2012** : 500 **2013** 500 **2014** : 500

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 112 Watershed Protection and Management
- 122 Management and Control of Forest and Range Fires
- 123 Management and Sustainability of Forest Resources

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Natural Disasters (drought, weather extremes, etc.)
- Economy
- Competing Public priorities
- Public Policy changes
- Competing Programmatic Challenges
- Appropriations changes
- Government Regulations

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Description

Traditionally, land management practices have been affected by macro-economic forces such as international trade as well as federal, state and local rules and regulations. Additionally, because OSU is under fairly severe budgetary constraints, it is conceivable that budget reductions could force programatic change.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)
- During (during program)
- Retrospective (post program)
- Case Study

Description

During and immediately after events, degree of learning will be documented. Follow up surveys will be used to assess degree of application of knowledge. Case study of individual land owners/land holdings will be used to determine the impacts of application of knowledge provided by OSUES.

2. Data Collection Methods

- Telephone
- Mail
- Sampling
- Case Study
- Structured

Description

Surveys will be conducted based upon OSU Institutional Review Board policies, proceedures, and guidelines. For quantitative data, customized mail and follow up telephone surveys will be used. The number of persons sampled will be based upon the estimated degree of variation in the target population and the desired degree of resolution. For qualitative assessments, care will be taken to assure that case studies are representative of the larger population served by the programming.

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V(A). Planned Program (Summary)

Program #4

1. Name of the Planned Program

4-H Environmental Stewardship

2. Brief summary about Planned Program

The need for increased science literacy and the application of science to natural resource management has gained in importance in recent years. This is especially true in Oregon where a workable balance of natural resources, conservation efforts, and economic development can be difficult to obtain. The goal of the 4-H program is to provide science-based educational programming in the natural sciences through which youth gain understanding in scientific inquiry and natural resources management, and develop skill in making sound resource management decisions that help support a sustainable future.

3. Program existence : Intermediate (One to five years)4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
806	Youth Development	100%			
	Total	100%			

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Oregonians have a long history of legislated environmental protections that began as early as the first civil government in the Oregon Country in 1843 and continued with legislation such as the 1967 Beach Bill, the 1971 Bottle Bill and the 1973 approval of statewide land use planning. The state's population growth continues to equal or out pace the national average, and diversity is increasing. Finding common ground to address and balance pressing environmental and economic issues and preserve the quality of life Oregonians value will require an engaged and educated citizenry. Yet, Oregonians face many critical environmental issues in agriculture, forestry, energy and marine and fisheries resources. The majority of Oregon's land area is in natural resource uses including dry and irrigated cropland, pasture, rangeland, woodlots and forested lands. They contribute to a large sector of Oregon's economy; one out of every 10 jobs directly related to these resources. Program Priorities 1. Provide experiential programs that assist youth and adults in underssanding natural science processes. 2. Provide youth and adults with science processing sills to empower them to address community issues. 3. Create opportunities for youth and adults to practice environmental stewardship to enhance their communities.

2. Scope of the Program

In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

4-H Youth Development programs are planned and delivered based on the theoretical model of positive youth development. This model, confirmed by current research, indicates that: 1. Youth benefit from participation in programs that meet key developmental needs. Programs that do this provide opportunities for belonging, mastery, independence, and

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generosity (Kress, 2004). 2. Participation in programs provides productive opportunities for the development of important life skills, such as leadership and citizenship. The 4-H program bases its life skill development on the Targeting Life Skills Model (Hendricks, 1996). In addition 4-H programs provide opportunities for youth to learn content-specific knowledge and skills in their 4-H project area. 3. The development of life skills and content knowledge contributes to the development of the 5 "C" outcomes of positive youth development programs. These outcomes are confidence, competence, character, connection, and caring (Roth, 2005). 4. Development of the 5 "C" outcomes leads ultimately to youth who are able to transition successfully to adulthood. As adults they are economically self-sufficient, have healthy family and social involvement, and are contributing members of their community (Gambone & Connell, 2005).

2. Ultimate goal(s) of this Program

The ultimate goal of this program plan, and the 4-H program in general is to help youth develop the skills and knowledge needed to lead productive, healthy, and contributing lives. Young people participating in this 4-H program develop science interest and skill, and will become effective stewards of the environment as adults. Because of this, quality of life and environmental integrity are maintained or improved through the implementation of socially, economically, and environmentally sustainable practices.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Vaca	Exte	nsion	Research	
Year	1862	1890	1862	1890
2010	10.0	0.0	0.0	0.0
2011	9.0	0.0	0.0	0.0
2012	8.0	0.0	0.0	0.0
2013	8.0	0.0	0.0	0.0
2014	8.0	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

•4-H natural science clubs •4-H residential camps •4-H in-school science programming (non-Wildlife Stewards)
•4-H Wildlife Stewards programming •4-H After-school science programs •Curriculum and material development

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension			
Direct Methods	Indirect Methods		
 Workshop One-on-One Intervention Education Class 	Web sitesNewsletters		

3. Description of targeted audience

Youth ages 9-18; Extension educators

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

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	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth	
Year	Target	Target	Target	Target	
2010	1000	1000	4000	40000	
2011	900	900	3600	36000	
2012	800	800	3270	32000	
2013	800	800	3270	32000	
2014	800	800	3270	32000	

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

2010:6

2011 :5

2012:5

2013:5

2014:5

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0

V(H). State Defined Outputs

1. Output Target

• Number of youth participating in 4-H environment and natural resource projects.

2010:15800

2011 13900

2012 :11850

2013:11850

2014 11850

Number of youth exhibiting natural science projects at the state fair.

2010 200

2011 176

2012 :150

2013:150

2014 150

• Number of 4-H Wildlife Stewards partner schools.

2010 55

2011 48

2012 :41

2013 41

2014 41

• Number of youth participating in the 4-H Wildlife Stewards program.

2010:10000

2011 8800

2012 :7500

2013 7500

2014 7500

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V(I). State Defined Outcome

O. No	Outcome Name	
1	Number of youth gaining knowledge in science or natural resources.	
2	Number of youth implenting practices to protect or improve the environment.	

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Outcome #1

1. Outcome Target

Number of youth gaining knowledge in science or natural resources.

2. Outcome Type : Change in Knowledge Outcome Measure

2010 :10000 **2011** : 10000 **2012** : 10000 **2013** :10000 **2014** :10000

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 806 - Youth Development

Outcome #2

1. Outcome Target

Number of youth implenting practices to protect or improve the environment.

2. Outcome Type: Change in Action Outcome Measure

2010:1000 **2011**:1000 **2012**:1000 **2013**:1000 **2014**:1000

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

806 - Youth Development

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Appropriations changes
- Public Policy changes
- Competing Programmatic Challenges
- Competing Public priorities

Description

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Retrospective (post program)
- After Only (post program)
- Case Study
- Before-After (before and after program)

Description

Annual performance monitoring data will be collected from all 36 counties to develop aggregate measures of learning and application of learning. Case studies will examine ways that young people are using knowledge to protect or improve the environment.

2. Data Collection Methods

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- Sampling
- Mail
- Observation
- Case Study

Description

Performance monitoring data will be collected through an annual report submitted by county 4-H faculty. Selelcted local programs will be the target of case studies.

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V(A). Planned Program (Summary)

Program #5

1. Name of the Planned Program

4-H Nutrition and Health

2. Brief summary about Planned Program

Obesity and its long-term impact on health has reached a crisis point. Research shows that lifelong nutrition and physical activities habits need to be established in childhood. The goal of the 4-H Nutrition and Health program is to increase the number of youth in Oregon who can maintain a healthy lifestyle through 1) learning how to select a balanced, nutritious diet, 2) developing skill to prepare food themselves, and 3) developing the skill and positive attitude to make physical activity a lifelong habit. Through a variety of educational activities, youth will develop and apply knowledge and skills in nutrition and food preparation to help ensure optimum health and well-being across the lifespan.

3. Program existence : Mature (More then five years)

4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
806	Youth Development	100%			
	Total	100%			

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Obesity and hunger are recognized nationally as problems of epidemic proportion. In particular, obesity has been shown to be associated with the early onset of diabetes, hypertension, and heart disease. Other research indicates that overweight children or adolescents are more than likely to be overweight adults and experience continuing health problems. Although a number of factors can be implicated, eating too many calories (fast food, large servings) and having a sedentary lifestyle (screen time on computers, TV, video games, etc) is most likely to cause obesity in young people. Giving youth the knowledge and skill to make more healthful decisions and to develop positive behaviors will help target this problem at an early stage. Knowledge and skills includes: Nutrition knowledge to be able to select a wide variety of foods to obtain the nutrients our bodies need: Food preparation skills as a means of providing choice and more control over what is eaten as well as managing costs; Knowledge and behavior change skills to build the habit of physical activity as a way of life for youth at all levels of athletic skill or physical ability. 4-H is positively positioned to reach a large number of Oregon youth. In addition, opportunities to access grants of varying sizes to help support these specific efforts are increasingly available. Program Priorities 1. Create and deliver programming for youth leading to increased food preparation skills and consumption of safer and more nutritional diets. 2. Create and deliver programming for youth leading to increased awareness of the relationship between agriculture and the foods they eat. 3. Create and deliver programming for youth leading to an increased awareness of the relationship between good nutrition and good health and positive changes in behaviors. 4. Create and deliver programming for youth leading to increased understanding about the relationship between physical activity and good health and to increased physical activity and improved health status.

2. Scope of the Program

In-State Extension

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V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

4-H Youth Development programs are planned and delivered based on the theoretical model of positive youth development. This model, confirmed by current research, indicates that: 1. Youth benefit from participation in programs that meet key developmental needs. Programs that do this provide opportunities for belonging, mastery, independence, and generosity (Kress, 2004). 2. Participation in programs provides productive opportunities for the development of important life skills, such as leadership and citizenship. The 4-H program bases its life skill development on the Targeting Life Skills Model (Hendricks, 1996). In addition 4-H programs provide opportunities for youth to learn content-specific knowledge and skills in their 4-H project area. 3. The development of life skills and content knowledge contributes to the development of the 5 "C" outcomes of positive youth development programs. These outcomes are confidence, competence, character, connection, and caring (Roth, 2005). 4. Development of the 5 "C" outcomes leads ultimately to youth who are able to transition successfully to adulthood. As adults they are economically self-sufficient, have healthy family and social involvement, and are contributing members of their community (Gambone & Connell, 2005).

2. Ultimate goal(s) of this Program

The ultimate goal of this plan of work, and the 4-H program in general, is to help youth and adults develop the skills and knowledge needed to lead productive, healthy, and contributing lives. Obesity and its long-term impact on health has reached a crisis point. Research shows that lifelong nutrition and physical activities habits need to be established in childhood. The goal of the this 4-H program is to increase the number of youth in Oregon who can maintain a healthy lifestyle through 1) learning how to select a balanced, nutritious diet, 2) developing skill to prepare food themselves, and 3) developing the skill and positive attitude to make physical activity a lifelong habit.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Voor	Extension		Research		
Year	1862 1890		1862 1890		
2010	10.8	0.0	0.0	0.0	
2011	9.8	0.0	0.0	0.0	
2012	8.8	0.0	0.0	0.0	
2013	8.8	0.0	0.0	0.0	
2014	8.8	0.0	0.0	0.0	

V(F). Planned Program (Activity)

1. Activity for the Program

•4-H foods and nutrition projects •4-H foods and nutrition contests •4-H curriculum development •Special 4-H projects related to foods and nutrition

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension			
Direct Methods	Indirect Methods		
 Other 2 (Exhibits) Workshop Education Class Other 1 (Contests) One-on-One Intervention 	Web sitesNewsletters		

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3. Description of targeted audience

Youth ages 9-18, Extension educators

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth	
Year	Target	Target	Target	Target	
2010	300	3000	23000	53000	
2011	270	2700	21700	47700	
2012	250	2500	18600	42900	
2013	250	2500	18600	42900	
2014	250	2500	18600	42900	

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

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2010:1 2011:1

2012:1

2013:1

2014:1

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0

V(H). State Defined Outputs

1. Output Target

Number of youth participating in Foods and Nutrition Projects.

2010:10900

2011 9590

2012:8175

2013 £175

2014 £175

• Number of youth participating in physical activity projects.

2010 3000

2011 2640

2012 :2250

2013 2250

2014 2250

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V(I). State Defined Outcome

O. No	Outcome Name
1	Number of youth gaining knowledge required to select or prepare healthy food.
2	Number of youth making behavioral changes which improving health.

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1. Outcome Target

Number of youth gaining knowledge required to select or prepare healthy food.

2. Outcome Type: Change in Knowledge Outcome Measure

2010 3000 **2011** : 3000 **2012** : 3000 **2013** 3000 **2014** : 3000

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

806 - Youth Development

Outcome #2

1. Outcome Target

Number of youth making behavioral changes which improving health.

2. Outcome Type: Change in Action Outcome Measure

2010:1500 **2011**:1500 **2012**:1500 **2013**:1500 **2014**:1500

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

806 - Youth Development

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Competing Public priorities
- Populations changes (immigration,new cultural groupings,etc.)
- Appropriations changes

Description

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Case Study
- Before-After (before and after program)
- After Only (post program)
- Retrospective (post program)

Description

Annual performance monitoring data will be collected from all 36 counties to develop aggregate measures of youth who have gained knowledge related to diet or physical activity. A statewide program evaluation was conducted to determine whether young people are making behavioral changes related to food intake or physical activity. Results of this study support the proejcted impact of this planned. Since literature has established linkages between lifestyle and health documenting behavior changes will provide a base from which safe inference can be made to the long-term effects of programming.

2. Data Collection Methods

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- Sampling
- Observation
- Tests
- Mail

Description

Performance monitoring data will be collected through an annual report submitted by county 4-H faculty. The statewide program evaluation will utilize end-of-event assessments, follow-up assessments (12-18 months), and case study methodologies.

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V(A). Planned Program (Summary)

Program #6

1. Name of the Planned Program

4-H Science, Technology, and Engineering

2. Brief summary about Planned Program

The need for increased science, technological, and engineering literacy gained in importance in recent years. The goal of this 4-H program plan is to provide educational programming that emphasizes the application of science and technology to everyday life as well as career interests and opportunities.

3. Program existence : Intermediate (One to five years)4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
806	Youth Development	100%			
	Total	100%			

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

A strong investment in high quality science education is essential if we are to prepare our youth for productive employment, healthful lifestyles, knowledgeable and contributing citizenship, strong family formation and other adult responsibilities. Science and technology are all around us and embedded in many of the projects and activities 4-H offers to youth. The scientific method is central to the development of many projects, from nutrition and natural science to computer science and photography. Many different 4-H projects can be used to help youth discover and apply science, technology and engineering in their daily lives. Today, many elementary teachers place less emphasis on science and technology than on reading, writing, and math, but most educators agree that scientific skills are critical to long term educational success. A recent study suggests that "students who are taught science in a hands-on, inquiry-based manner" can begin to develop life skills such as problem solving, critical thinking, and teamwork (www.BayerUS.com/MSMS). Traditional 4-H projects like nutrition and new projects like GPS/GIS technology can be used to attract and engage youth in this initiative through all delivery modes, including clubs, camps, school enrichment, and after school programs. Program Priorities 1. Create and deliver programming to teach youth and adults about new and emerging technologies 3. Create and deliver programming to expand interest and knowledge about science among youth. 4. Create and deliver programming to give volunteers the capacity to teach science, technology and engineering.

2. Scope of the Program

In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

4-H Youth Development programs are planned and delivered based on the theoretical model of positive youth development. This model, confirmed by current research, indicates that: 1. Youth benefit from participation in programs that meet key developmental needs. Programs that do this provide opportunities for belonging, mastery, independence, and

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generosity (Kress, 2004). 2. Participation in programs provides productive opportunities for the development of important life skills, such as leadership and citizenship. The 4-H program bases its life skill development on the Targeting Life Skills Model (Hendricks, 1996). In addition 4-H programs provide opportunities for youth to learn content-specific knowledge and skills in their 4-H project area. 3. The development of life skills and content knowledge contributes to the development of the 5 "C" outcomes of positive youth development programs. These outcomes are confidence, competence, character, connection, and caring (Roth, 2005). 4. Development of the 5 "C" outcomes leads ultimately to youth who are able to transition successfully to adulthood. As adults they are economically self-sufficient, have healthy family and social involvement, and are contributing members of their community (Gambone & Connell, 2005).

2. Ultimate goal(s) of this Program

The ultimate goal of this program plan, and the 4-H program in general is to help youth develop the skills and knowledge needed to lead productive, healthy, and contributing lives. Young people participating in this 4-H program will possess an understanding of the role of science, technology, and engineering in the contemporary world. They will develop skills and abilities for success in education and careers that rely on the application of science and technology. In doing so, the 4-H program is contributing to the long-term economic and social stability of a technologically advanced workforce.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

V	Exte	nsion	Re	search
Year	1862	1890	1862	1890
2010	8.8	0.0	0.0	0.0
2011	8.0	0.0	0.0	0.0
2012	7.2	0.0	0.0	0.0
2013	7.2	0.0	0.0	0.0
2014	7.2	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

•4-H science clubs/programs (animal science, horticulture) •4-H technology clubs/programs (Tech Wizards, Lego Robotics) •4-H engineering clubs/programs/camps (Technology Camp) •National 4-H Technology Conference •After school science programs (not-environmental science) •Curriculum and material development

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension				
Direct Methods Indirect Methods				
Education Class	Newsletters			
Workshop	Web sites			
One-on-One Intervention				
Other 1 (Contests)				
Other 2 (Exhibits)				

3. Description of targeted audience

Youth ages 9-18; 4-H Volunteer leaders; Extension educators

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V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2010	2000	2000	40000	40000
2011	1800	1800	36000	36000
2012	1720	1720	32760	32760
2013	1720	1720	32760	32760
2014	1720	1720	32760	32760

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

2010:5

2011:4

2012:4

2013:4

2014:4

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0

V(H). State Defined Outputs

1. Output Target

• Number of youth participating in 4-H science and technology projects and programs.

2010:15000

2011 13500

2012 :12150

2013:12150

2014 :12150

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V(I). State Defined Outcome

O. No	Outcome Name
1	Number of youth gaining skills in science and technology.
2	Number of youth utilizing science and technology skills to improve their school or community.
3	Number of youth whose career choice was affected by participation in 4-H science and technology
	programs.

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1. Outcome Target

Number of youth gaining skills in science and technology.

2. Outcome Type: Change in Knowledge Outcome Measure

2010 5000 **2011** : 4500 **2012** : 4000 **2013** 4000 **2014** : 4000

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 806 - Youth Development

Outcome #2

1. Outcome Target

Number of youth utilizing science and technology skills to improve their school or community.

2. Outcome Type: Change in Knowledge Outcome Measure

2010 :1000 **2011** : 1000 **2012** : 1000 **2013** :1000 **2014** :1000

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

806 - Youth Development

Outcome #3

1. Outcome Target

Number of youth whose career choice was affected by participation in 4-H science and technology programs.

2. Outcome Type : Change in Action Outcome Measure

2010 300 **2011** : 300 **2012** : 300 **2013** 300 **2014** : 300

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 806 - Youth Development

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Economy
- Competing Public priorities
- Competing Programmatic Challenges

Description

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

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- Case Study
- Retrospective (post program)
- Before-After (before and after program)
- After Only (post program)

Description

Performance monitoring data will be collected from all 36 counties to develop aggregate measures of outputs and outcomes. A statewide program evaluation of 4-H science, technology, and engineering programs will be conducted in 2009.

2. Data Collection Methods

- Whole population
- Case Study
- Sampling
- Mail

Description

Performance monitoring data will be collected through an annual report submitted by county faculty. The statewide program evaluation will utilize end-of-program assessments of knowledge and skill attainment and case studies to examine how youth are applying what they have learned.

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V(A). Planned Program (Summary)

Program #7

1. Name of the Planned Program

Ag: Small Farms and 'Natural' and Organic Production Systems

2. Brief summary about Planned Program

Over 50% of all farms in Oregon are less than 50 acres in size but still constitute an important contribution to the economy and represent an important group of people needing assistance with management of natural resources and new enterprises. Many small farmers use direct marketing methods such as farmers' markets which have increased in number from 18 to 68 statewide in the past 10 years. Organic and "natural" agricultural products represent a diverse and rapidly growing sector of the food market. Consumers are increasing aware of food safety and health concerns and often view organically produced foods as a healthy food choice. Numerous traditional farmers and ranchers are establishing new organic and "natural" production enterprises to capitalize on this new market opportunity. The opportunity for Extension to provide educational forums and conduct and interpret applied research results is significant. This effort will help producers solve production problems, increase profitability, and better manage the natural resource base.

3. Program existence: Mature (More then five years)

4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

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KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
101	Appraisal of Soil Resources	5%			
102	Soil, Plant, Water, Nutrient Relationships	10%			
112	Watershed Protection and Management	10%			
204	Plant Product Quality and Utility (Preharvest)	5%			
205	Plant Management Systems	10%			
216	Integrated Pest Management Systems	10%			
307	Animal Production Management Systems	10%			
308	Improved Animal Products (Before Harvest)	10%			
403	Waste Disposal, Recycling, and Reuse	10%			
604	Marketing and Distribution Practices	20%			
	Total	100%			

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Small farms and organic and natural production systems represent a large segment of the Agricultural community and a large diverse set of needs and interests. The largest opportunities for Extension educational programs to make a difference include targeting the reduction of nutrient and soil runoff; enhancing the long term viability of farmers' markets; expanding the availability of economically viable technologies and production techniques or systems; and development of a variety of electronic information systems that provide immediate assistance and improve the face to face support when needed.

2. Scope of the Program

- In-State Extension
- Integrated Research and Extension

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V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Agriculture and natural resources will continue to be an important part of the economy of the rural and urban communities where crops are produced and/or processed. Population pressures toward the rural urban fringe will stimulate the development of small and non-traditional production systems (organic and natural). Consumer concerns about what constitutes healthy food will continue to drive demand for local, organic, and natural food products. Globalization will expand the potential market for non-traditionally produced products. Federal, state and local regulations may favor some enterprises and stimulate development of non-traditional production systems. Development and land-use regulation will not create an environment that in not conducive to local small-scale food production.

2. Ultimate goal(s) of this Program

Improve the economic and environmental sustainability of small and organic farms by employing appropriate technologies and production and marketing techniques.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Vaar	Exte	nsion	Re	search
Year	1862	1890	1862	1890
2010	10.0	0.0	0.0	0.0
2011	9.0	0.0	0.0	0.0
2012	8.0	0.0	0.0	0.0
2013	8.0	0.0	0.0	0.0
2014	8.0	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

A combination of activities (methods listed below) that are designed to meet the needs and opportunities of the communities of interest will be built upon the research base of the university. These activities will be specifically designed to elicit learning, application of learning, and social, economic and environmental impacts on target populations.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension			
Direct Methods Indirect Methods			
Demonstrations	Web sites		
One-on-One Intervention	 Newsletters 		
Group Discussion			
Workshop			
Education Class			

3. Description of targeted audience

1) Producers of naturally or organically produced crops and livestock products and/or small farms for either life-style, hobby, or commercial purposes. 2) Agricultural infrastructure, suppliers and service providers 3) State and federal agencies overseeing regulatory and incentive based programs

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V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2010	26000	100000	1000	1000
2011	23400	90000	900	900
2012	21000	80000	800	800
2013	21000	80000	800	800
2014	21000	80000	800	800

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

2010:21

2011 :18

2012:16

2013:16

2014:16

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0

V(H). State Defined Outputs

1. Output Target

• Number of Educational Classes Delivered

2010 :150 **2011** :132 **2012** :113 **2013** :113 **2014** :113

Number of Workshops Delivered

2010 50 **2011** 44 **2012** :38 **2013** 38 **2014** 38

Number of Group Discussions

2010 20 **2011** 17 **2012** :15 **2013** :15 **2014** :15

Number of One-on-one Interventions

2010 :1300 **2011** :1144 **2012** :975 **2013** 975 **2014** 975

Number of Demonstrations

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	2010 34	2011 30	2012 :26	2013 26	2014 26
•	Number of Web Sites Mair	ntained			
	2010 5	2011 4	2012 :3	2013 ß	2014 3
•	Number of Newspaper Arti	cles Published			
	2010 34	2011 30	2012 :25	2013 25	2014 25

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V(I). State Defined Outcome

O. No	Outcome Name			
1	Increase in number of farms that are using best management practices leading to reduced nutrient loading			
	of surface water and soil erosion.			
2	Increase in number of farmer's markets statewide.			
3	% increase in gross sales at farmers' markets statewide.			
4	% increase in gross value of non-traditional crops produced in Oregon			
5	Number of farmers (x 1000) using OSU Extension Service information.			
6	6 Economic value derived from application of new information and production methods by participating			
	farmers (Million \$).			

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1. Outcome Target

Increase in number of farms that are using best management practices leading to reduced nutrient loading of surface water and soil erosion.

2. Outcome Type: Change in Action Outcome Measure

2010 :100 **2011** :100 **2012** :100 **2013** :100 **2014** :100

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 101 Appraisal of Soil Resources
- 102 Soil, Plant, Water, Nutrient Relationships
- 112 Watershed Protection and Management
- 216 Integrated Pest Management Systems
- 307 Animal Production Management Systems
- 403 Waste Disposal, Recycling, and Reuse

Outcome #2

1. Outcome Target

Increase in number of farmer's markets statewide.

2. Outcome Type: Change in Action Outcome Measure

2010 5 **2011** : 5 **2012** : 5 **2013** 5 **2014** : 5

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 604 - Marketing and Distribution Practices

Outcome #3

1. Outcome Target

% increase in gross sales at farmers' markets statewide.

2. Outcome Type: Change in Action Outcome Measure

2010 5 **2011** : 5 **2012** : 5 **2013** 5 **2014** : 5

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

604 - Marketing and Distribution Practices

Outcome #4

1. Outcome Target

% increase in gross value of non-traditional crops produced in Oregon

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2. Outcome Type: Change in Action Outcome Measure

2010 5 **2011** : 5 **2012** : 5 **2013** 5 **2014** : 5

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 102 Soil, Plant, Water, Nutrient Relationships
- 204 Plant Product Quality and Utility (Preharvest)
- 216 Integrated Pest Management Systems
- 308 Improved Animal Products (Before Harvest)
- 604 Marketing and Distribution Practices

Outcome #5

1. Outcome Target

Number of farmers (x 1000) using OSU Extension Service information.

2. Outcome Type : Change in Knowledge Outcome Measure

2010 5 **2011** : 5 **2012** : 5 **2013** 5 **2014** : 5

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 101 Appraisal of Soil Resources
- 102 Soil, Plant, Water, Nutrient Relationships
- 112 Watershed Protection and Management
- 204 Plant Product Quality and Utility (Preharvest)
- 205 Plant Management Systems
- 216 Integrated Pest Management Systems
- 307 Animal Production Management Systems
- 308 Improved Animal Products (Before Harvest)
- 403 Waste Disposal, Recycling, and Reuse
- 604 Marketing and Distribution Practices

Outcome #6

1. Outcome Target

Economic value derived from application of new information and production methods by participating farmers (Million \$).

2. Outcome Type : Change in Condition Outcome Measure

2010 :7 **2011** :7 **2012** :7 **2013** :7 **2014** :7

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

101 - Appraisal of Soil Resources

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- 102 Soil, Plant, Water, Nutrient Relationships
- 112 Watershed Protection and Management
- 204 Plant Product Quality and Utility (Preharvest)
- 205 Plant Management Systems
- 216 Integrated Pest Management Systems
- 307 Animal Production Management Systems
- 308 Improved Animal Products (Before Harvest)
- 403 Waste Disposal, Recycling, and Reuse
- 604 Marketing and Distribution Practices

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Competing Public priorities
- Public Policy changes
- Economy
- Government Regulations
- Natural Disasters (drought, weather extremes, etc.)
- Populations changes (immigration,new cultural groupings,etc.)
- Appropriations changes
- Competing Programmatic Challenges

Description

Small farms and alternative production systems are extremely vulnerable to regulatory, economic, and policy changes. Public opinion can also be very fickle driving consumers to or away from specific products. For example, outbreaks of food-borne illness resulting from produce purchased at a farmers' market could greatly impact future sales. The factors identified above can either increase or reduce the effectiveness of programming.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Case Study
- Before-After (before and after program)
- Comparisons between program participants (individuals,group,organizations) and non-participants

Description

Appropriate surveys will be conducted; industry trends and data on production practices in the industry will be monitored; input and equipment sales will be an indicator of adoption of some practices; case study measurements of soil and water quality will provide an indication of progress; producer surveys will also provide an indication of adoption.

2. Data Collection Methods

- Observation
- Unstructured
- Mai
- Case Study
- Telephone

Description

Surveys will be conducted based upon OSU Institutional Review Board policies, procedures, and guidelines. For quantitative data, customized mail and follow up telephone surveys will be used. The number of persons sampled will be based upon the estimated degree of variation in the target population and the desired degree of resolution. For qualitative assessments, care will be taken to assure that case studies are representative of the larger population served by the

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2010 Oregon State University Extension Plan of Work

programming.

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V(A). Planned Program (Summary)

Program #8

1. Name of the Planned Program

Ag: Dryland Cropping Systems

2. Brief summary about Planned Program

The dryland cropping system program focuses primarily on the more than one million acres in the Columbia Basin that is largely planted to winter wheat. Dryland production systems are major contributors to the economies of many Northeastern Oregon communities. Challenges include competing in world markets, maintaining profitability, effectively managing pests, preserving soil and water quality, and sustaining rural communities. The overall goal is to improve the economic and environmental sustainability of dryland cropping systems by employing appropriate production and marketing techniques and technologies. Furthermore, appropriate use of science-based information is critical to the development of sound policy affecting land use in the region.

3. Program existence : Mature (More then five years)

4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

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KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	15%			
111	Conservation and Efficient Use of Water	15%			
112	Watershed Protection and Management	15%			
205	Plant Management Systems	15%			
216	Integrated Pest Management Systems	10%			
502	New and Improved Food Products	10%			
511	New and Improved Non-Food Products and Processes	5%			
601	Economics of Agricultural Production and Farm Management	10%			
604	Marketing and Distribution Practices	5%			
	Total	100%			

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Many rural communities are highly dependent upon agriculture as the backbone of their economy. However some currently utilized crop production practices may contribute to a decline in soil quality and hasten erosion of soil. Certain pests including invasive plant species are also increasing problems in this area with limited cropping diversity and low rainfall. This coupled with low commodity prices and limited marketing options leads to a farming system that is not sustainable in its present form. The development of reduced tillage production systems coupled with appropriate new varieties of wheat and other alternative crops can provide more sustainable production alternatives. The use of research results in the establishment of policy and regulation is also key to the future of agriculture in the region.

2. Scope of the Program

- Multistate Extension
- In-State Research
- Multistate Research
- In-State Extension
- Integrated Research and Extension
- Multistate Integrated Research and Extension

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V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Agriculture and natural resources will continue to be an important part of the economy of rural communities where dryland crop production systems exist. As markets become more globalized there will still be profitable niche markets for products produced in this environment. Governmental regulations may favor some enterprises. Government regulations will not impose such high costs for meeting regulations that producers will be able to continue to operate.

2. Ultimate goal(s) of this Program

To improve the economic and environmental sustainability of dryland cropping systems by employing appropriate production and marketing techniques and technologies.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Vasa	Exte	Extension		Research		
Year	1862	1890	1862	1890		
2010	18.3	0.0	0.0	0.0		
2011	16.0	0.0	0.0	0.0		
2012	14.8	0.0	0.0	0.0		
2013	14.8	0.0	0.0	0.0		
2014	14.8	0.0	0.0	0.0		

V(F). Planned Program (Activity)

1. Activity for the Program

A combination of activities (methods listed below) that are designed to meet the needs and opportunities of the communities of interest will be built upon the research base of the university.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension				
Direct Methods	Indirect Methods			
 Workshop Demonstrations Group Discussion One-on-One Intervention Education Class 	NewslettersWeb sites			

3. Description of targeted audience

1. Crop producers primarily in the Columbia Basin of Oregon and Washington and Western Idaho.2. Agricultural infrastructure and service providers in Oregon, Washington and Idaho3. State and federal agencies managing both regulatory and incentive based programs

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

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	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2010	32000	100000	1000	1000
2011	28800	90000	900	900
2012	26000	80000	800	800
2013	26000	80000	800	800
2014	26000	80000	800	800

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

2010:23

2011:20

2012:17

2013:17

2014:17

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0

V(H). State Defined Outputs

1. Output Target

Number of Educational Classes Delivered

•	Trainber of Educational Glasses Pelivered					
	2010 :113	2011 100	2012 :85	2013 £5	2014 £5	
•	Number of Workshops Del	livered				
	2010 :113	2011 100	2012 :85	2013 85	2014 85	
•	Number of Group Discussi	ions				
	2010 5 6	2011 50	2012 :42	2013 42	2014 42	
•	Number of One-On-One In	nterventions				
	2010 471	2011 4 15	2012 :353	2013 353	2014 353	
•	Number of Demonstrations	S				
	2010 28	2011 25	2012 :21	2013 21	2014 21	
•	Number of Web Sites Maintained					
	2010 4	2011 4	2012 :3	2013 3	2014 3	

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Number of Newspaper Articles Published

2010 38 **2011** 33 **2012** :28 **2013** 28 **2014** 28

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V(I). State Defined Outcome

O. No	Outcome Name			
1	Acres of improved wheat varieties planted times the proven economic advantage above the industry norm (Million \$).			
2	Acres planted to new crops as a result of OSU research and Extension programs times the proven			
	economic advantage over the norm (Million \$)			
3	Established value of application of new technologies per acre time the number of acres affected (Million \$)			
4	% reduction in soil erosion when new technologies are employed.			
5	Percentage of farmers using Extension information.			
6	Value of new processes and products applied because of OSU Extension programming (Million \$).			

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1. Outcome Target

Acres of improved wheat varieties planted times the proven economic advantage above the industry norm (Million \$).

2. Outcome Type: Change in Action Outcome Measure

2010 :1 **2011** :1 **2012** :1 **2013** :1 **2014** :1

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 102 Soil, Plant, Water, Nutrient Relationships
- 111 Conservation and Efficient Use of Water
- 112 Watershed Protection and Management
- 205 Plant Management Systems
- 216 Integrated Pest Management Systems
- 502 New and Improved Food Products
- 511 New and Improved Non-Food Products and Processes
- 601 Economics of Agricultural Production and Farm Management
- 604 Marketing and Distribution Practices

Outcome #2

1. Outcome Target

Acres planted to new crops as a result of OSU research and Extension programs times the proven economic advantage over the norm (Million \$)

2. Outcome Type: Change in Action Outcome Measure

2010 5 **2011** : 5 **2012** : 5 **2013** 5 **2014** : 5

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 102 Soil, Plant, Water, Nutrient Relationships
- 111 Conservation and Efficient Use of Water
- 112 Watershed Protection and Management
- 205 Plant Management Systems
- 216 Integrated Pest Management Systems
- 502 New and Improved Food Products
- 511 New and Improved Non-Food Products and Processes
- 601 Economics of Agricultural Production and Farm Management
- 604 Marketing and Distribution Practices

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1. Outcome Target

Established value of application of new technologies per acre time the number of acres affected (Million \$)

2. Outcome Type: Change in Condition Outcome Measure

2010 :1 **2011** :1 **2012** :1 **2013** :1 **2014** :1

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 102 Soil, Plant, Water, Nutrient Relationships
- 111 Conservation and Efficient Use of Water
- 112 Watershed Protection and Management
- 205 Plant Management Systems
- 216 Integrated Pest Management Systems
- 502 New and Improved Food Products
- 511 New and Improved Non-Food Products and Processes
- 601 Economics of Agricultural Production and Farm Management
- 604 Marketing and Distribution Practices

Outcome #4

1. Outcome Target

% reduction in soil erosion when new technologies are employed.

2. Outcome Type: Change in Condition Outcome Measure

2010 5 **2011** : 5 **2012** : 5 **2013** 5 **2014** : 5

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 102 Soil, Plant, Water, Nutrient Relationships
- 111 Conservation and Efficient Use of Water
- 112 Watershed Protection and Management
- 216 Integrated Pest Management Systems

Outcome #5

1. Outcome Target

Percentage of farmers using Extension information.

2. Outcome Type: Change in Knowledge Outcome Measure

2010 :70 **2011** : 75 **2012** : 75 **2013** :80 **2014** :80

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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- 102 Soil, Plant, Water, Nutrient Relationships
- 111 Conservation and Efficient Use of Water
- 112 Watershed Protection and Management
- 205 Plant Management Systems
- 216 Integrated Pest Management Systems
- 502 New and Improved Food Products
- 511 New and Improved Non-Food Products and Processes
- 601 Economics of Agricultural Production and Farm Management
- 604 Marketing and Distribution Practices

1. Outcome Target

Value of new processes and products applied because of OSU Extension programming (Million \$).

2. Outcome Type: Change in Condition Outcome Measure

2010 3 **2011** : 3 **2012** : 3 **2013** 3 **2014** : 3

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 102 Soil, Plant, Water, Nutrient Relationships
- 111 Conservation and Efficient Use of Water
- 112 Watershed Protection and Management
- 205 Plant Management Systems
- 216 Integrated Pest Management Systems
- 502 New and Improved Food Products
- 511 New and Improved Non-Food Products and Processes
- 601 Economics of Agricultural Production and Farm Management
- 604 Marketing and Distribution Practices

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Competing Programmatic Challenges
- Economy
- Populations changes (immigration,new cultural groupings,etc.)
- Competing Public priorities
- Public Policy changes
- Natural Disasters (drought, weather extremes, etc.)
- Appropriations changes
- Government Regulations

Description

Agricultural production in the region is very sensitive to the effects of weather, policy, and consumer demand. Additionally,

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wheat grown in the region is largely exported to Asia exposing producers to international market drivers and policies of external trading partners.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Comparisons between program participants (individuals,group,organizations) and non-participants
- Case Study
- Before-After (before and after program)

Description

Specific data collection methods will be appropriately designed for the survey method being used. Since a variety of surveys will be used the specifics are not discussed here.

2. Data Collection Methods

- Observation
- Telephone
- Unstructured
- Mail
- Case Study

Description

Surveys will be conducted based upon OSU Institutional Review Board policies, procedures, and guidelines. For quantitative data, customized mail and follow up telephone surveys will be used. The number of persons sampled will be based upon the estimated degree of variation in the target population and the desired degree of resolution. For qualitative assessments, care will be taken to assure that case studies are representative of the larger population served by the programming.

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V(A). Planned Program (Summary)

Program #9

1. Name of the Planned Program

Ag: Livestock Based Production Systems

2. Brief summary about Planned Program

Dairy is in the top 5 largest commodities in Oregon with a farm gate value of \$272 million. Dairy producers provide an important component of the economic base of several rural communities. Challenges include being competitive in the market place, maintaining profitability, management of waste products while preserving environmental quality. Beef cattle and calves have a farm gate value \$429 million, the second largest commodity in Oregon. Other livestock add to the economic importance of this group. Ranches and feeding operations are critical to the economy in much of Eastern Oregon. Challenges include being competitive in the world markets, maintaining profitability, assuring a safe high quality product, and management of waste products while preserving environmental quality. Pasture and forages are the backbone of the livestock production system. The value of hay is over \$318 million and is the third largest commodity in Oregon but this does not include millions of dollars in value for the hay directly used on farms, and not sold. There are over 850,000 acres of cultivated/improved pasturelands in Oregon. Public rangelands provide an important contribution to the forage base for grazing in beef and sheep production. The uses of rangelands are often the subject of debate which includes concerns with the impact of grazing on the rangeland health and associated riparian areas. Education programs that promote proper use of public and private rangelands so that livestock production can be maintained at a sustainable level while accommodating range and riparian health can be a win – win for interested parties. In addition to the commodities in this plan, soil and water-watershed education plays a critical role in protecting natural resources. The educational process promotes improved understanding between groups with diverse values. These educational programs address industrial waste water and biosolid disposal, management of agricultural inputs, understanding soil capabilities and limitations, and methods for improvement of watershed health. Other challenges or opportunities include improvements in value added processing, utilizing science in establishment of public policy, being competitive in the market place, improving profitability and assuring a high quality product while protecting environmental quality.

3. Program existence : Mature (More then five years)4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

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KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	10%			
112	Watershed Protection and Management	10%			
121	Management of Range Resources	20%			
205	Plant Management Systems	5%			
303	Genetic Improvement of Animals	5%			
307	Animal Production Management Systems	20%			
308	Improved Animal Products (Before Harvest)	5%			
311	Animal Diseases	10%			
315	Animal Welfare, Well-Being and Protection	5%			
501	New and Improved Food Processing Technologies	10%			
	Total	100%			

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Many rural communities are highly dependent upon animal agriculture as the mainstay of their economy. This is most common in eastern Oregon where ranching is a common enterprise. Dairy plays an important role along the Columbia River and on the coast. However, science based policy and regulation, value added processing, waste management, and grazing practices along waterways are issues of concern to many interest groups. Profitability is limited by low commodity prices, limited markets, imports, and high input costs which lead to a production and processing system that is not sustainable. Animal quality and health assurance issues include the tracking of animals from ranch to consumers. Improvements in these issues will assist the animal agricultural industry in maintaining it important contributions to the social infrastructure, economy, and environment.

2. Scope of the Program

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- In-State Extension
- In-State Research
- Multistate Integrated Research and Extension
- Multistate Extension
- Integrated Research and Extension
- Multistate Research

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Agriculture and natural resources will continue to be an important part of the economy of the rural and urban communities where these crops are produced or processed. As markets become more globalized there will still be profitable niche markets for the Oregon products. Governmental regulations may favor some enterprises. Government regulations will not impose such high costs for meeting regulations that producers will be able to continue to operate.

2. Ultimate goal(s) of this Program

To increase the utilization of economically and environmentally sustainable range, pasture, livestock, and watershed management practices, marketing techniques, and technologies for strengthening agricultural industries and communities in Oregon.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Exte	Extension		Research		
rear	1862	1890	1862	1890		
2010	22.3	0.0	0.0	0.0		
2011	20.0	0.0	0.0	0.0		
2012	18.0	0.0	0.0	0.0		
2013	18.0	0.0	0.0	0.0		
2014	18.0	0.0	0.0	0.0		

V(F). Planned Program (Activity)

1. Activity for the Program

A combination of activities (methods listed below) that are designed to meet the needs and opportunities of the communities of interest will be built upon the research base of the university.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension					
Direct Methods	Indirect Methods				
 Demonstrations One-on-One Intervention Workshop 	Web sitesNewsletters				
Group Discussion Education Class					

3. Description of targeted audience

1.Ranchers, dairy producers and animal product processors2.Agricultural infrastructure, suppliers and service providers3.State and federal agencies managing both regulatory and incentive based programs

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V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2010	76000	100000	1000	1000
2011	67400	90000	900	900
2012	60000	80000	800	800
2013	60000	80000	800	800
2014	60000	80000	800	800

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

2010:64

2011:56

2012:48

2013:48

2013 212

2014:48

2014 212

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0

V(H). State Defined Outputs

1. Output Target

2010 282

• Number of Education Classes Planned

2010 282 **2011** 248 **2012** :211 **2013** 211 **2014** 211 • Number of Workshops Planned

2012 :212

Number of Group Discussions Planned

2010 1.41 **2011** 1.24 **2012** :106 **2013** 1.06 **2014** 1.06

• Number of One-On-One Interventions Planned

2011 248

2010 1176 **2011** 1035 **2012** :882 **2013** 882 **2014** 882

Number of Demonstrations Planned

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	2010 <i>7</i> 1	2011 62	2012 :53	2013 5 3	2014 5 3	
•	Web Sites Maintained					
	2010 ß	2011 3	2012 :2	2013 2	2014 2	
•	Newspaper Articles Planned					
	2010 94	2011 83	2012 :70	2013 <i>7</i> 0	2014 <i>7</i> 0	

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V(I). State Defined Outcome

O. No	Outcome Name	
1	Increased market value (Million \$) created by application of new processes and animal products.	
2	Economic value of assistance from OSU Extension Service professionals as reported by producers (Million	
	\$).	

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1. Outcome Target

Increased market value (Million \$) created by application of new processes and animal products.

2. Outcome Type: Change in Condition Outcome Measure

2010 2 **2011** : 2 **2012** : 2 **2013** 2 **2014** : 2

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 102 Soil, Plant, Water, Nutrient Relationships
- 112 Watershed Protection and Management
- 121 Management of Range Resources
- 205 Plant Management Systems
- 303 Genetic Improvement of Animals
- 307 Animal Production Management Systems
- 308 Improved Animal Products (Before Harvest)
- 311 Animal Diseases
- 315 Animal Welfare, Well-Being and Protection
- 501 New and Improved Food Processing Technologies

Outcome #2

1. Outcome Target

Economic value of assistance from OSU Extension Service professionals as reported by producers (Million \$).

2. Outcome Type: Change in Condition Outcome Measure

2010 3 **2011** : 3 **2012** : 3 **2013** 3 **2014** : 3

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 102 Soil, Plant, Water, Nutrient Relationships
- 112 Watershed Protection and Management
- 121 Management of Range Resources
- 205 Plant Management Systems
- 303 Genetic Improvement of Animals
- 307 Animal Production Management Systems
- 308 Improved Animal Products (Before Harvest)
- 311 Animal Diseases
- 315 Animal Welfare, Well-Being and Protection
- 501 New and Improved Food Processing Technologies

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V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Economy
- Populations changes (immigration,new cultural groupings,etc.)
- Public Policy changes
- Competing Programmatic Challenges
- Appropriations changes
- Competing Public priorities
- Natural Disasters (drought, weather extremes, etc.)
- Government Regulations

Description

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Case Study
- Comparisons between program participants (individuals, group, organizations) and non-participants
- Before-After (before and after program)

Description

Appropriate surveys will be conducted; industry trends and data on production practices in the industry will be monitored; input and equipment sales will be an indicator of adoption of some practices; case study measurements of soil and/or water quality will provide an indication of progress; producer surveys will also provide an indication of adoption of improved technologies.

2. Data Collection Methods

- Mail
- Unstructured
- Case Study
- Observation
- Telephone

Description

Surveys will be conducted based upon OSU Institutional Review Board policies, procedures, and guidelines. For quantitative data, customized mail and follow up telephone surveys will be used. The number of persons sampled will be based upon the estimated degree of variation in the target population and the desired degree of resolution. For qualitative assessments, care will be taken to assure that case studies are representative of the larger population served by the programming.

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V(A). Planned Program (Summary)

Program #10

1. Name of the Planned Program

Ag: High Rainfall and Irrigated Cropping Systems

2. Brief summary about Planned Program

Crops included in this plan of work include grass seed, potato, mint, cereals, hops, sugarbeets, onions, and seed certification services which occupy over 750,000 acres in Oregon. In addition, Oregon produces over \$20 million in snap beans, \$30 million in sweet corn, \$13 million in specialty seed, \$12 million in squash and pumpkins, and \$72 million in onions, as well as many other high quality processed and fresh market vegetable crops. The berry crop industry in Oregon includes commercial production of blackberry, blueberry, red and black raspberry, strawberry, cranberry, gooseberries, currants, kiwifruit, and other berry crops. The total farm gate value of these industries in Oregon was \$109.1 million in 2004. Many of these crops are processed, thus adding value to Oregon's economy. Oregon has a robust wine industry. Industry leaders place great value on producing premium wines garnering international recognition and prizes. The Oregon industry currently produces 20 tons of grapes per acre on 14,000 acres. Oregon nurseries are prospering, growing at about twice the rate as the national nursery industry, and they are ranked 3rd behind California and Florida. During the late 1990's, the industry benefited from a strong construction market, rising household incomes, and growing interests in landscape aesthetics and environmental enrichment. Oregon's 2003 nursery and greenhouse gross sales were estimated at \$779 million. This is the highest nursery value ever estimated and the industry has about doubled in size over the past decade. About 75% of all Oregon grown nursery plants are shipped out of state, which accounts for 11% of the national market. Nurseries vary greatly in size, from 1000+ acre operations to those occupying just a guarter acre. Nursery and greenhouse operations are very labor intensive and these Oregon industries employ more than 22,000 workers. Oregon's \$282 million orchard industry in 2004 comprised pears, cherries, apples and hazelnuts. The educational process addresses homeowner and industrial waste water and biosolid disposal, management of agricultural inputs, understanding soil capabilities and limitations, and methods for improvement of watershed health. Extension is participating with the agricultural industry in developing and implementing programs related to the following topics: being competitive in a worldwide market, developing new value added products, expanding markets and market niches, increasing product quality, achieving technological advantages, implementing integrated pest management, preserving soil, water and watershed quality, dealing with many aspects of labor, and improving input management efficiencies. In addition, producers and processors are developing programs that certify cultural practices for their protection of the environment; they are also concerned about utilizing science in establishment of policy.

3. Program existence : Mature (More then five years)

4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

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KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
102	Soil, Plant, Water, Nutrient Relationships	10%			
111	Conservation and Efficient Use of Water	10%			
112	Watershed Protection and Management	10%			
204	Plant Product Quality and Utility (Preharvest)	10%			
205	Plant Management Systems	10%			
216	Integrated Pest Management Systems	10%			
403	Waste Disposal, Recycling, and Reuse	10%			
405	Drainage and Irrigation Systems and Facilities	10%			
502	New and Improved Food Products	10%			
603	Market Economics	10%			
	Total	100%			

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Many rural communities are highly dependent upon agriculture as the mainstay of their economies. Some of these high value crops are also important to more urban areas as well. However, some currently utilized crop production practices do not utilize inputs efficiently and contribute to a decline in the environment and soil quality. Certain pests including invasive plant species are increasing. This coupled with low commodity prices, high input costs, and limited markets leads to a farming system that is not sustainable. The use of new technologies, improvement of input efficiencies, application of integrated pest management technologies, development of new markets and value added products will assist the agricultural industry in maintaining important contributions to the social infrastructure, economy, and environment.

2. Scope of the Program

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- Multistate Integrated Research and Extension
- Integrated Research and Extension
- Multistate Extension
- In-State Research
- Multistate Research
- In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Agriculture and natural resources will continue to be an important part of the economy of the rural and urban communities where these crops are produced or processed. As markets become more globalized there will still be profitable niche markets for producets produced. Governmental regulations may favor some enterprises. Government regulations will not impose such high costs for meeting regulations that producers will be able to continue to operate.

2. Ultimate goal(s) of this Program

The overall goal is to assist the various communities of interest in development and use of processing, production, and pest control practices that lead to higher quality and more diverse food and fiber products demanded by consumers with the intent that these activities and technologies will lead to a more economically and environmentally sustainable group of agricultural industries and communities.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Exte	nsion	Re	search
Tear	1862	1890	1862	1890
2010	61.8	0.0	0.0	0.0
2011	56.0	0.0	0.0	0.0
2012	50.0	0.0	0.0	0.0
2013	50.0	0.0	0.0	0.0
2014	50.0	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

A combination of activities (methods listed below) that are designed to meet the needs and opportunities of the communities of interest will be built upon the research base of the university.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension					
Direct Methods Indirect Methods					
 Demonstrations One-on-One Intervention Education Class Group Discussion Workshop 	NewslettersWeb sites				

3. Description of targeted audience

1. Crop producers in this group of crops generally produced in the high rain fall or irrigated production system in Oregon2. Agricultural infrastructure, suppliers and service providers3. State and federal agencies managing both regulatory and incentive

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based programs

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2010	126000	400000	1000	1000
2011	113400	360000	900	900
2012	102000	324000	800	800
2013	102000	324000	800	800
2014	102000	324000	800	800

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

2010:49

2011 :43

2012:37

2013:37

2014:37

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0

V(H). State Defined Outputs

1. Output Target

• Number of Educational Classes Planned

2010 493

2011 434

2012:370

2013 370

2014 370

Number of Workshops Planned

2010 493

2011 433

2012 :370

2013 370

2014 370

Number of Group Discussions Planned

2010 246

2011 216

2012:185

2013:185

2014 :185

• Number of Demonstrations Planned

2010:123

2011 108

2012 :92

2013 92

2014 92

• Number of One-On-One Interventions Planned

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	2010 2052	2011 . 1806	2012 :1539	2013 :1539	2014 :1539
•	Web Sites Maintained (Pla	nned)			
	2010 ຄ	2011 5	2012 :4	2013 4	2014 4
•	Number of Newspaper Arti	cles Planned			
	2010 :164	2011 144	2012 :123	2013 :123	2014 :123

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V(I). State Defined Outcome

O. No	Outcome Name
1	Thousands of acres of improved varieties planted
2	Thousands of acres of new crops planted
3	Economic impact of new varieties planted (Million \$)
4	Economic value of new crops planted (Million \$)
5	Improvement in air, soil and water parameters resulting from application of new technologies (% Improvement)
6	Sales value (Million \$) of new value added products
7	Value of information received by growers (Million \$; reported value based on survey results)

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1. Outcome Target

Thousands of acres of improved varieties planted

2. Outcome Type: Change in Action Outcome Measure

2010 6 **2011** : 6 **2012** : 6 **2013** 6 **2014** : 6

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 102 Soil, Plant, Water, Nutrient Relationships
- 111 Conservation and Efficient Use of Water
- 112 Watershed Protection and Management
- 204 Plant Product Quality and Utility (Preharvest)
- 205 Plant Management Systems
- 216 Integrated Pest Management Systems
- 403 Waste Disposal, Recycling, and Reuse
- 405 Drainage and Irrigation Systems and Facilities
- 502 New and Improved Food Products
- 603 Market Economics

Outcome #2

1. Outcome Target

Thousands of acres of new crops planted

2. Outcome Type : Change in Action Outcome Measure

2010 :10 **2011** :10 **2012** :10 **2013** :10 **2014** :10

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 102 Soil, Plant, Water, Nutrient Relationships
- 111 Conservation and Efficient Use of Water
- 112 Watershed Protection and Management
- 204 Plant Product Quality and Utility (Preharvest)
- 205 Plant Management Systems
- 216 Integrated Pest Management Systems
- 403 Waste Disposal, Recycling, and Reuse
- 405 Drainage and Irrigation Systems and Facilities
- 502 New and Improved Food Products
- 603 Market Economics

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1. Outcome Target

Economic impact of new varieties planted (Million \$)

2. Outcome Type: Change in Action Outcome Measure

2010 :1 **2011** :1 **2012** :1 **2013** :1 **2014** :1

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 102 Soil, Plant, Water, Nutrient Relationships
- 111 Conservation and Efficient Use of Water
- 112 Watershed Protection and Management
- 204 Plant Product Quality and Utility (Preharvest)
- 205 Plant Management Systems
- 216 Integrated Pest Management Systems
- 403 Waste Disposal, Recycling, and Reuse
- 405 Drainage and Irrigation Systems and Facilities
- 502 New and Improved Food Products
- 603 Market Economics

Outcome #4

1. Outcome Target

Economic value of new crops planted (Million \$)

2. Outcome Type : Change in Knowledge Outcome Measure

2010 3 **2011** : 3 **2012** : 3 **2013** 3 **2014** : 3

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 102 Soil, Plant, Water, Nutrient Relationships
- 111 Conservation and Efficient Use of Water
- 112 Watershed Protection and Management
- 204 Plant Product Quality and Utility (Preharvest)
- 205 Plant Management Systems
- 216 Integrated Pest Management Systems
- 403 Waste Disposal, Recycling, and Reuse
- 405 Drainage and Irrigation Systems and Facilities
- 502 New and Improved Food Products
- 603 Market Economics

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1. Outcome Target

Improvement in air, soil and water parameters resulting from application of new technologies (% Improvement)

2. Outcome Type: Change in Condition Outcome Measure

2010 8 **2011** : 8 **2012** : 8 **2013** 9 **2014** : 9

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 102 Soil, Plant, Water, Nutrient Relationships
- 111 Conservation and Efficient Use of Water
- 112 Watershed Protection and Management
- 403 Waste Disposal, Recycling, and Reuse
- 405 Drainage and Irrigation Systems and Facilities

Outcome #6

1. Outcome Target

Sales value (Million \$) of new value added products

2. Outcome Type : Change in Condition Outcome Measure

2010 :10 **2011** : 10 **2012** : 10 **2013** : 10 **2014** : 10

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 102 Soil, Plant, Water, Nutrient Relationships
- 111 Conservation and Efficient Use of Water
- 112 Watershed Protection and Management
- 204 Plant Product Quality and Utility (Preharvest)
- 205 Plant Management Systems
- 216 Integrated Pest Management Systems
- 502 New and Improved Food Products
- 603 Market Economics

Outcome #7

1. Outcome Target

Value of information received by growers (Million \$; reported value based on survey results)

2. Outcome Type : Change in Condition Outcome Measure

2010 1.0 **2011** : 1.0 **2012** : 1.0 **2013** 1.0 **2014** : 1.0

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

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- 102 Soil, Plant, Water, Nutrient Relationships
- 111 Conservation and Efficient Use of Water
- 112 Watershed Protection and Management
- 204 Plant Product Quality and Utility (Preharvest)
- 205 Plant Management Systems
- 216 Integrated Pest Management Systems
- 403 Waste Disposal, Recycling, and Reuse
- 405 Drainage and Irrigation Systems and Facilities
- 502 New and Improved Food Products
- 603 Market Economics

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Appropriations changes
- Economy
- Public Policy changes
- Government Regulations
- Populations changes (immigration,new cultural groupings,etc.)
- Competing Programmatic Challenges
- Competing Public priorities
- Natural Disasters (drought, weather extremes, etc.)

Description

These production systems are extremely vulnerable to regulatory, economic, and policy changes. Public opinion can also be very fickle driving consumers to or away from specific products. The factors identified above can either increase or reduce the effectiveness of programming.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)
- Case Study
- Comparisons between program participants (individuals group organizations) and non-participants

Description

Specific data collection methods will be appropriately designed for the survey method being used. Since a variety of surveys will be used the specifics are not discussed here.

2. Data Collection Methods

- Telephone
- Mail
- Unstructured
- Case Study

Description

Surveys will be conducted based upon OSU Institutional Review Board policies, procedures, and guidelines. For quantitative data, customized mail and follow up telephone surveys will be used. The number of persons sampled will be based upon the estimated degree of variation in the target population and the desired degree of resolution. For qualitative assessments, care will be taken to assure that case studies are representative of the larger population served by the programming.

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V(A). Planned Program (Summary)

Program #11

1. Name of the Planned Program

Healthy People, Healthy Communities

2. Brief summary about Planned Program

This program has several primary aims involving the health of Oregon individuals, families and communities, including (a) to improve health, reduce obesity, and reduce risk of chronic diseases through healthy eating combined with daily physical activity; (b) to reduce the incidence of foodborne illness in Oregon, and (c) to increase household and community food security. These aims will be pursued through Extension teaching and translational research strategies that are targeted to identified audiences. The program incorporates collaboration with state agencies and local partners, as well as OSU's College of Health and Human Sciences and other units on the OSU campus.

3. Program existence : Mature (More then five years)

4. Program duration : Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
703	Nutrition Education and Behavior	50%			
704	Nutrition and Hunger in the Population	25%			
724	Healthy Lifestyle	25%			
	Total	100%			

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

Poor nutrition and physical inactivity are linked to chronic illnesses such as obesity and diabetes. In 2003, 57% of adult Oregonians were obese or overweight (DHS, Behavioral Risk Factors Surveillance System, 2003); 23% of 8th graders were overweight or at risk of overweight (DHS, Oregon Healthy Teens Survey, 2003). Fifty percent of Oregon adults didn't meet minimum physical activity recommendations (DHS, BRFSS, 2003). Only 1 in 4 Oregonians reported eating five or more servings of fruits and vegetables per day in 2003 (DHS, BRFSS, 2003). "Healthy, Active Oregon", a statewide public health nutrition and physical activity plan, promotes healthy eating combined with daily physical activity to improve health and reduce risk of chronic diseases (www.healthoregon.org/hpcdp/physicalactivityandnutrition/). Pregnant women, young children, older adults and other people with compromised immune systems are at risk for foodborne illness. Oregon FoodNet data show decreased incidence of illness caused by some pathogens (CDC, 2005). Food safety/preservation education continues to be of importance to maintain and extend these improvements. Oregon's high rate of hunger and food insecurity necessitate the availability of emergency and other food assistance programs for low-income families. Oregon hunger rates are significantly higher than the national average for three categories that aren't usually at risk: double income households, households without unemployed people, and two parent households with children.

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2. Scope of the Program

- Integrated Research and Extension
- In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

The need for Extension programs related to nutrition, physical activity, food safety, and food security will continue in Oregon. Extension program activities will continue to be funded through a variety of funding sources, including federal grants as well as state funds. Agency partnerships will continue with state government, the Oregon Food Bank, and other institutions. Extension program development will continue to draw on emerging knowledge, from the land grants and other locations, about best practices related to the promotion of health among individuals, families, and communities.

2. Ultimate goal(s) of this Program

•To improve health, reduce obesity, and reduce risk of chronic diseases through healthy eating combined with daily physical activity
•To reduce the incidence of foodborne illness in Oregon
•To increase household and community food security

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Vace	Exte	nsion	Re	search
Year	1862	1890	1862	1890
2010	15.3	0.0	0.0	0.0
2011	12.3	0.0	0.0	0.0
2012	9.3	0.0	0.0	0.0
2013	9.3	0.0	0.0	0.0
2014	9.3	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Stakeholder input will be acquired from numerous sources, including state government agencies, the Oregon Food Bank, local funders, consumers, food policy councils, health care provider organizations, and other organizations and consortia. Programs will be delivered based on several factors, including the identification of critical audiences at local levels, working organizational partnerships, and input from OSU researchers. Target audiences will be identified and the most effective programming options will be identified and implemented.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension				
Direct Methods Indirect Methods				
Education ClassWorkshopDemonstrations	Web sitesNewsletters			

3. Description of targeted audience

The target audience will consist of low-income and high-risk families, including parents, children, and seniors.

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V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth	
Year	Target	Target	Target	Target	
2010	11000	85000	50000	55000	
2011	9000	76500	45000	49500	
2012	8800	68000	40000	44500	
2013	8800	68000	40000	44500	
2014	8800	68000	40000	44500	

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

2010:11

2011:10

2012:8

2013:8

2013 2

2014:8

2014 2

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0

V(H). State Defined Outputs

1. Output Target

2010 3

• Educational Events and Workshops to be Delivered

2011 3

2010 330 2011 290 2012:248 **2013** 248 2014 248 Demonstrations to be Conducted **2010** 330 2011 290 2012 :248 **2013** 248 2014 248 Newsletters to be Published 2010:100 **2011** 88 **2012** :75 **2013** 75 **2014** 75 Web Sites to be Developed/Maintained

2012 :2

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V(I). State Defined Outcome

O. No	Outcome Name
1	Percentage of participants that will indicate positive change related to nutritional content of food purchases for their family.
2	Percentage of participants that report improved food resource management (meal planning and food budgeting).
3	Percentage of participants that report improved food safety practices such as preparation, thawing and storing procedures.
4	Percentage of participating families that will report increased physical activity among their children.

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1. Outcome Target

Percentage of participants that will indicate positive change related to nutritional content of food purchases for their family.

2. Outcome Type : Change in Action Outcome Measure

2010 60 **2011** : 60 **2012** : 60 **2013** 60 **2014** : 60

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 703 Nutrition Education and Behavior
- 704 Nutrition and Hunger in the Population
- 724 Healthy Lifestyle

Outcome #2

1. Outcome Target

Percentage of participants that report improved food resource management (meal planning and food budgeting).

2. Outcome Type: Change in Action Outcome Measure

2010 :70 **2011** : 70 **2012** : 70 **2013** : 70 **2014** : 70

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 703 Nutrition Education and Behavior
- 704 Nutrition and Hunger in the Population

Outcome #3

1. Outcome Target

Percentage of participants that report improved food safety practices such as preparation, thawing and storing procedures.

2. Outcome Type: Change in Action Outcome Measure

2010 60 **2011** : 60 **2012** : 60 **2013** 60 **2014** : 60

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 703 - Nutrition Education and Behavior

Outcome #4

1. Outcome Target

Percentage of participating families that will report increased physical activity among their children.

2. Outcome Type : Change in Action Outcome Measure

2010 50 **2011** : 50 **2012** : 50 **2013** 50 **2014** : 50

3. Associated Institute Type(s)

•1862 Extension

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4. Associated Knowledge Area(s)

• 724 - Healthy Lifestyle

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Appropriations changes
- Competing Public priorities
- Government Regulations
- Competing Programmatic Challenges
- Public Policy changes
- Economy
- Populations changes (immigration,new cultural groupings,etc.)

Description

Because of the blending of funding that supports the nutrition education programming at OSU, changes in policy or appropriation of funds can greatly impact our ability to deliver programming. Additionally, any factors that impact food assistance delivery to lower income populations will affect their abilities to respond to training. As new target audiences are introduced to our programs, rates of success may be impacted. It is necessary to develop culturally appropriate approaches when new audiences are engaged.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)
- Retrospective (post program)

Description

Annual performance monitoring data will be collected from participating counties to develop aggregate measures of program participants who have gained knowledge related to diet or physical activity.

2. Data Collection Methods

- Observation
- Journals
- Structured
- Telephone
- Mail
- Sampling
- Unstructured
- On-Site

Description

Surveys will be conducted based upon OSU Institutional Review Board policies, procedures, and guidelines. For quantitative data, customized on-site surveys will be used. The number of persons sampled will be based upon the estimated degree of variation in the target population and the desired degree of resolution. For qualitative assessments, care will be taken to assure that case studies are representative of the larger population served by the programming.

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V(A). Planned Program (Summary)

Program #12

1. Name of the Planned Program

Healthy Aging

2. Brief summary about Planned Program

This program has several primary aims including to increase the independence and well-being of older individuals and their family caregivers, as well as to promote informed decision making that can lead to improved economic and health situations among families with aging adults. These aims will be pursued through Extension teaching and translational research strategies that are targeted to identified audiences. The program incorporates collaboration with state agencies and local partners, as well as OSU's College of Health and Human Sciences and other units on the OSU campus.

3. Program existence : Mature (More then five years)

4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
724	Healthy Lifestyle	50%			
802	Human Development and Family Well-Being	50%			
	Total	100%			

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

The number of people in the United States over age 65 is forecast to more than double in the next quarter century, growing from 35 million to 72 million – or 20.7 percent of the U.S. population. In Oregon, the projections are even higher, as older adults will comprise more than 25% of the population by 2050. Some of Oregon's more rural counties are already characterized by 20-25% of their populations over 65 (Source: Center for Healthy Aging, OSU). The "graying" of Oregon means that Oregon State University Extension Service needs to deliver high quality professional programs in communities, reaching older adults, family caregivers, and professionals. This Extension FCD work area has an important role as the outreach arm of the newly funded OSU Center for Healthy Aging Research on campus. There has been a 41% increase in Oregon's over-65 population since the 2000 census, and Oregon is projected to be the state with the 4th highest proportion of older adults by 2025. Older adults are also expected to account for more than half of single-person households in Oregon, with the highest rates in rural areas. Recent reports indicate that these older adults can anticipate a substantially increased life expectancy, with 45% of older Americans projected to live to age 90. Yet few institutions in the state are planning for ways to deal with an aging population. Aging populations face multiple physical and mental health conditions, such as heart disease, diabetes, arthritis, depression, dementia, and osteoporosis. Currently 80% of the over 65 population has one chronic disease condition and 50% have two or more. Aging, chronically ill populations can benefit from the health promotion, disease prevention instructional materials and educational opportunities provided through Extension programs. New strategies and technologies will be important for connecting these older adults living alone to their family members and service providers. Strategies will also be needed to assist individuals with chronic conditions in becoming self-managers. Older adults and their families will need information that ranges from how to effectively communicate with health providers to the importance of nutrient-dense eating. Planning for health care, living situations, family relationships, and financial resources will require increased knowledge about aging processes to better

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inform healthy living.

2. Scope of the Program

- Integrated Research and Extension
- In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

The need for Extension programs related to healthy aging will continue in Oregon. The Extension Family and Community Development program will continue to partner with the Center for Healthy Aging Research at OSU. Collaborations will continue with state government, local institutions, and other organizations. Extension program development will continue to draw on emerging knowledge, from the Land Grant Institution and other locations, about best practices related to the promotion of health and well-being for older adults and for the development of knowledge and skills among their family caregivers.

2. Ultimate goal(s) of this Program

•To improve the physical and mental health of Oregon's older adults, and the well-being of their families, by strengthening their capacities to optimize healthy aging

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Vaan	Exte	nsion	Re	search
Year	1862	1890	1862	1890
2010	2.9	0.0	0.0	0.0
2011	2.5	0.0	0.0	0.0
2012	2.3	0.0	0.0	0.0
2013	2.3	0.0	0.0	0.0
2014	2.3	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Stakeholder input will be acquired from agency partners including Oregon Senior and Disabled Services in the Dept. of Human Services, the regional Area Agencies on Aging, Oregon AARP, and others. Programs will be delivered based on the identification of critical audiences at local levels, working organizational partnerships, and input from OSU researchers. Target audiences will be identified and the most effective programming options will be identified and implemented. Extension activities will be coordinated with the recently established Center for Healthy Aging Research on the OSU campus.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension			
Direct Methods	Indirect Methods		
 Demonstrations Workshop Education Class 	 TV Media Programs Public Service Announcement Newsletters Web sites 		

3. Description of targeted audience

The target audience will consist of older adults living in Oregon (particularly those at some risk with regard to their health and well-being), family caregivers, and professionals.

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V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2010	1250	0	0	0
2011	1125	0	0	0
2012	1000	0	0	0
2013	1000	0	0	0
2014	1000	0	0	0

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

2010:4

2011:3

2012:3

2013:3

2013 45

2014:3

2014 45

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0

V(H). State Defined Outputs

1. Output Target

2010 60

• Educational Events, Workshops, and Demonstrations to be Conducted

2011 53

Public Service Announcements to be Delivered
 2010 5
 2011 4
 2012 :4
 2013 4
 2014 4
 Newsletters to be Published
 2010 :12
 2011 :11
 2012 :9
 2013 9
 2014 9

2012:45

TV and Media Programs to be Delivered

2010 3 **2011** 3 **2012** :2 **2013** 2 **2014** 2

Web Sites to be Developed and Maintained

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2010:1 2011:1 2013:1

2014 :1

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V(I). State Defined Outcome

O. No	Outcome Name
1	Percentage of participants that indicate increased knowledge about healthy aging practices including diet, activity, medication management, health monitoring, and family relationships.
2	Percentage of participating family health care providers that report informed decision-making related to older adults in their care.
3	Percentage of participants reporting improvement in their overall (age-adjusted) health status as a result of the program.

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1. Outcome Target

Percentage of participants that indicate increased knowledge about healthy aging practices including diet, activity, medication management, health monitoring, and family relationships.

2. Outcome Type: Change in Knowledge Outcome Measure

2011: 60 **2012**: 60 **2013** 60 **2014**: 60

3. Associated Institute Type(s)

•1862 Extension

2010 £60

4. Associated Knowledge Area(s)

- 724 Healthy Lifestyle
- 802 Human Development and Family Well-Being

Outcome #2

1. Outcome Target

Percentage of participating family health care providers that report informed decision-making related to older adults in their care.

2. Outcome Type: Change in Action Outcome Measure

2010 50 **2011** : 50 **2012** : 50 **2013** 50 **2014** : 50

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 724 Healthy Lifestyle
- 802 Human Development and Family Well-Being

Outcome #3

1. Outcome Target

Percentage of participants reporting improvement in their overall (age-adjusted) health status as a result of the program.

2. Outcome Type: Change in Condition Outcome Measure

2010 40 **2011** : 40 **2012** : 40 **2013** #0 **2014** : 40

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

- 724 Healthy Lifestyle
- 802 Human Development and Family Well-Being

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

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- Government Regulations
- Competing Programmatic Challenges
- Populations changes (immigration, new cultural groupings, etc.)
- Economy
- Appropriations changes
- Competing Public priorities
- Public Policy changes

Description

There are many societal factors that affect the well-being of older adults including social networks, access to health care and community supports. Any of these may influence the status of the target population and create challenges for our programs.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Retrospective (post program)
- Before-After (before and after program)

Description

Pre test - post test and retrospective pre-test methods will be used to determine changes in participants knowledge, skills, behaviors and health status.

2. Data Collection Methods

- Structured
- Sampling
- On-Site

Description

Surveys will be conducted based upon OSU Institutional Review Board policies, procedures, and guidelines. For quantitative data, customized on-site surveys will be used. The number of persons sampled will be based upon the estimated degree of variation in the target population and the desired degree of resolution. For qualitative assessments, care will be taken to assure that case studies are representative of the larger population served by the programming.

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V(A). Planned Program (Summary)

Program #13

1. Name of the Planned Program

Financial Literacy

2. Brief summary about Planned Program

This program's primary aim is to increase the use of effective financial planning by individuals and families in Oregon, leading to a reduction of debt and an increase in savings. Program activities will include Extension teaching and translational research strategies that are targeted to identified audiences. The program incorporates collaboration with state agencies and local partners, as well as OSU's College of Health and Human Sciences and other units on the OSU campus.

3. Program existence : Intermediate (One to five years)4. Program duration : Medium Term (One to five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds : Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
801	Individual and Family Resource Management	100%			
	Total	100%			

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

For many Oregon families, their level of economic security often hinges on their day-to-day decisions regarding spending, saving, and credit use. In 2002, there were 20,043 consumer bankruptcies filed in Oregon, and rates continue to stay high. Low wages and high housing costs have caused many of Oregon's working families to be in precarious financial conditions. In this situation, each financial decision can have immediate positive or negative impacts on the family's bottom line. Interactive programming to teach basic skills such as analyzing personal values, developing achievable goals, tracking spending, budgeting, using credit wisely, and repairing credit problems continues to be needed in all Oregon communities. The growing national problem of financial fraud and identity theft lends another dimension of urgency to this topic. For example, in 2004, there were 7,912 fraud and identity theft complaints lodged by Oregon consumers. Of those, 3,530 reported specific amounts of monetary loss, with a total loss of \$2,793,274. Many more incidents of this type go unreported. These statistics underscore the need for educational programs that focus on skills involving purchasing, personal financial management and consumer rights.

2. Scope of the Program

- In-State Extension
- Integrated Research and Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

The need for Extension programs related to financial literacy will continue in Oregon. Agency collaborations will continue with public and private institutions. Extension program development will continue to draw on emerging knowledge, from the Land Grant Institutions and other locations, about best practices related to the promotion of financial literacy and economic security among Extension audiences.

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2. Ultimate goal(s) of this Program

To improve the economic security of Oregon families by strengthening their capacities and skills in areas pertinent to financial literacy.

V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Year	Exte	nsion	Re	search
rear	1862	1890	1862	1890
2010	1.6	0.0	0.0	0.0
2011	1.4	0.0	0.0	0.0
2012	1.3	0.0	0.0	0.0
2013	1.3	0.0	0.0	0.0
2014	1.3	0.0	0.0	0.0

V(F). Planned Program (Activity)

1. Activity for the Program

Stakeholder input will be acquired from various sources including agency partners, local housing authorities, and coalitions related to financial management such as county-level consumer credit counseling bureaus. Programs will be delivered based on the identification of critical audiences at local levels, working organizational partnerships, and input from OSU researchers. Target audiences will be identified and the most effective programming options will be identified and implemented.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension			
Direct Methods	Indirect Methods		
Workshop Education Class	Newsletters		

3. Description of targeted audience

The target audience will consist of low-income and high-risk families, including parents, children, and seniors.

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

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	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2010	210	0	0	0
2011	190	0	0	0
2012	170	0	0	0
2013	170	0	0	0
2014	170	0	0	0

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

2010:3

2011 :2

2012:1

2013:1

2014:1

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0

V(H). State Defined Outputs

1. Output Target

Educational Events and workshops to be Conducted

2010 25

2011 22

2012 :19

2013:19

2014 :19

Newsletters to be Published

2010 6

2011 5

2012 :5

2013 5

2014 5

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V(I). State Defined Outcome

O. No	Outcome Name			
1	Percentage of participants indicating increased knowledge and skill in financial planning.			
2	2 Percentage of participants indicating application of acquired financial management practices.			

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1. Outcome Target

Percentage of participants indicating increased knowledge and skill in financial planning.

2. Outcome Type: Change in Knowledge Outcome Measure

2010 :75 **2011** : 75 **2012** : 75 **2013** :75 **2013** :75

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 801 - Individual and Family Resource Management

Outcome #2

1. Outcome Target

Percentage of participants indicating application of acquired financial management practices.

2. Outcome Type: Change in Action Outcome Measure

2010 50 **2011** : 50 **2012** : 50 **2013** 50 **2014** : 50

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 801 - Individual and Family Resource Management

V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Appropriations changes
- Competing Public priorities
- Government Regulations
- Competing Programmatic Challenges
- Economy
- Public Policy changes

Description

Changes in policies that impact the financial status of individuals in our target population may affect their ability to manage their finances.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)
- Retrospective (post program)

Description

Pre-post and retrospective pre-test methods will be used to determine changes in our participants knowledge and behaviors.

2. Data Collection Methods

- Structured
- Sampling
- On-Site

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Description

Surveys will be conducted based upon OSU Institutional Review Board policies, procedures, and guidelines. For quantitative data, customized on-site surveys will be used. The number of persons sampled will be based upon the estimated degree of variation in the target population and the desired degree of resolution.

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V(A). Planned Program (Summary)

Program #14

1. Name of the Planned Program

Sea Grant: Water Protection and Management

2. Brief summary about Planned Program

The purpose of the planned program is to educate decision-makers, professionals, and the public about the importance of coastal and coastal-influenced watersheds and to stimulate adoption of habitat restoration and enhancement practices leading to protection, maintenance and restoration of watersheds.

3. Program existence : Mature (More then five years)

4. Program duration: Long-Term (More than five years)

5. Expending formula funds or state-matching funds : Yes

6. Expending other than formula funds or state-matching funds: Yes

V(B). Program Knowledge Area(s)

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
112	Watershed Protection and Management	100%			
	Total	100%			

V(C). Planned Program (Situation and Scope)

1. Situation and priorities

There is a critical need to protect and restore endangered species; restore the functions and values of watershed resources for fish, water conservation, and other values; protect against non-point source pollution (particularly in urban areas); and prevent, reduce, or eliminate the threat to native wildlife and coastal economies of invasive aquatic nuisance species. These watershed issues, unless addressed, can cause significant social dislocation and strife throughout our society and threaten landand water-based industries, local communities, water providers, and the state's general resources, with millions of dollars of revenue lost, and may undermine the state's ability to provide sustainable, viable economies of interest or place.

2. Scope of the Program

- Integrated Research and Extension
- Multistate Integrated Research and Extension
- In-State Extension

V(D). Planned Program (Assumptions and Goals)

1. Assumptions made for the Program

Communities will adopt socially acceptable and ecologically and economically sustainable practices for protecting and managing watersheds and the values they provide. Communities will adopt socially acceptable and ecologically and economically sustainable practices for managing storm runoff and non-point source pollution. Introductions and impacts of invasive species will be reduced. Youths become catalysts for watershed stewardship

2. Ultimate goal(s) of this Program

Productivity and sustainability of natural systems and communities will be enhanced by knowledge and information provided by the Watershed Education Program.

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V(E). Planned Program (Inputs)

1. Estimated Number of professional FTE/SYs to be budgeted for this Program

Vacan	Extension		Research		
Year	1862	1890	1862	1890	
2010	2.8	0.0	0.0	0.0	
2011	2.5	0.0	0.0	0.0	
2012	2.3	0.0	0.0	0.0	
2013	2.3	0.0	0.0	0.0	
2014	2.3	0.0	0.0	0.0	

V(F). Planned Program (Activity)

1. Activity for the Program

We will work with officials and residents on programs and policies that lead to: a) more effective watershed management, b) stormwater and non-point source pollution mitigation, c) enhancement of local basins, d) sustainability of fish and wildlife populations and the ecosystems they reside in and e) awareness, prevention and control of aquatic invasive species. These activities that will promote adoption of watershed-friendly management practices by individuals, watershed councils, governments and non-governmental organizations. Dedicate effort to involve youth in educational programs leading to change in behavior and application of appropriate practices. Work with the Invasive Species Council will be used to assess the effectiveness of programming in increasing awareness, preventing, controlling and eliminating invasive species.

2. Type(s) of methods to be used to reach direct and indirect contacts

Extension		
Direct Methods	Indirect Methods	
DemonstrationsWorkshopEducation Class	Web sitesNewsletters	

3. Description of targeted audience

Watershed council members, educators, watershed-affiliated agencies, landowners, watershed recreationists, and other interested groups or individuals through leadership development, community involvement

V(G). Planned Program (Outputs)

1. Standard output measures

Target for the number of persons(contacts) to be reached through direct and indirect contact methods

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	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
Year	Target	Target	Target	Target
2010	500	1500	0	0
2011	450	1350	0	0
2012	400	1210	0	0
2013	400	1210	0	0
2014	400	1210	0	0

2. (Standard Research Target) Number of Patent Applications Submitted

Expected Patent Applications

2010:11

2011:10

2012:8

2013:8

2013:1

2014:8

2014 :1

3. Expected Peer Review Publications

Year	Research Target	Extension Target	Total
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0

V(H). State Defined Outputs

1. Output Target

2010:1

2011 1

•	Number of Educational Cla	asses to be Conducted			
	2010 :10	2011 9	2012 :8	2013 ß	2014 B
•	Number of Workshops to b	e Conducted			
	2010 5	2011 4	2012 :4	2013 4	2014 4
•	Number of Group Discussi	ons to be Conducted			
	2010 2	2011 2	2012 :2	2013 2	2014 2
•	Number of Demonstrations	s to be Conducted			
	2010 :1	2011 1	2012 :1	2013 :1	2014 :1
•	Number of Newsletters to I	oe Published			
	2010 2	2011 2	2012 :2	2013 2	2014 2
•	Number of Web Sites to be	e Developed and Maintained			

2012:1

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V(I). State Defined Outcome

O. No	Outcome Name			
1	umber of local program/policy changes leading to improved watershed health, invasive species			
	management, or enhancement of local basins.			
2	Watershed-friendly practices employed by individuals, watershed councils, governments and NGOs			
	adopted as a result of OSU programming.			
3	Number of youth participating in educational programming and watershed-friendly projects.			
4	% increase in reporting of invasive species as a result of OSU programming.			

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1. Outcome Target

Number of local program/policy changes leading to improved watershed health, invasive species management, or enhancement of local basins.

2. Outcome Type: Change in Action Outcome Measure

2010 5 **2011** : 5 **2012** : 5 **2013** 5 **2014** : 5

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

112 - Watershed Protection and Management

Outcome #2

1. Outcome Target

Watershed-friendly practices employed by individuals, watershed councils, governments and NGOs adopted as a result of OSU programming.

2. Outcome Type: Change in Action Outcome Measure

2010 25 **2011** : 25 **2012** : 25 **2013** 25 **2014** : 25

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 112 - Watershed Protection and Management

Outcome #3

1. Outcome Target

Number of youth participating in educational programming and watershed-friendly projects.

2. Outcome Type: Change in Knowledge Outcome Measure

2010 200 **2011** : 200 **2012** : 200 **2013** 200 **2014** : 200

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 112 - Watershed Protection and Management

Outcome #4

1. Outcome Target

% increase in reporting of invasive species as a result of OSU programming.

2. Outcome Type : Change in Action Outcome Measure

2010 :10 **2011** : 15 **2012** : 15 **2013** 20 **2014** : 20

3. Associated Institute Type(s)

•1862 Extension

4. Associated Knowledge Area(s)

• 112 - Watershed Protection and Management

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V(J). Planned Program (External Factors)

1. External Factors which may affect Outcomes

- Public Policy changes
- Competing Public priorities
- Government Regulations
- Natural Disasters (drought, weather extremes, etc.)
- Appropriations changes
- Economy

Description

Waterhed management practices are largely determined by local, state and federal regulations. Changes in these regulations may enhance or retard efforts and progress. Application of watershed enhancement practices is also affected by available public funding. Therefore progress can be enhanced or restricted by available funding. Development of coastal regions often pits economic interests against environmental interests. This can affect public sentiment and direct policy and development and implementation of regulations.

V(K). Planned Program (Evaluation Studies and Data Collection)

1. Evaluation Studies Planned

- Before-After (before and after program)
- During (during program)
- Case Study
- Retrospective (post program)

Description

Appropriate surveys will be conducted; organizational and individual trends and data on management practices will be monitored; case study measurements of watershed health will provide an indication of progress.

2. Data Collection Methods

- Case Study
- Sampling
- Mail
- Telephone
- Unstructured

Description

Surveys will be conducted based upon OSU Institutional Review Board policies, proceedures, and guidelines. For quantitative data, customized mail and follow up telephone surveys will be used. The number of persons sampled will be based upon the estimated degree of variation in the target population and the desired degree of resolution. For qualitative assessments, care will be taken to assure that case studies are representative of the larger population served by the programming.

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